SERVICE MANUAL

FISHER

INTEGRATED STEREO AMPLIFIER

CA-915

(EUROPE)

132 339 40

SPECIFICATIONS

Remote Control (REM-915)	38-button, wireless remote control

POWER AMPLIFIER SECTION

Minimum RMS sine wave power per channel within stated bandwidth at no more than stated distortion and with 8-ohm load	120 W (DIN)
Power Bandwidth	20 Hz – 20 kHz
Total Harmonic Distortion	0.03 %
I.M. Distortion	0.03 %
Speaker Damping	>40

PREAMPLIFIER SECTION

Frequency Response	
Phono (RIAA)	±1 dB
Aux (20 Hz – 20 kHz)	±1 dB
Input Sensitivity and Impedance	
Phono	2.5 mV/50 kΩ
Tape Monitor 1, 2,3	150 mV/50 kΩ
Tuner/CD/Aux	150 mV/50 kΩ
Phono Max. Input Capability	170 mV
Tone Controls	
Bass (100 Hz)	±10 dB
Mid Range (1 kHz)	±10 dB
Treble (10 kHz)	±10 dB
Super Bass (63 Hz)	+6 dB
Subsonic Filter (Below 20 Hz)	−12 dB/Oct.
Loudness Contour (100 Hz/10 kHz)	+8 dB/+4 dB
Hum and Noise (DIN)	
Phono	75 dB
Tape Monitor 1, 2,3	90 dB
Tuner/CD/Aux	90 dB
Source Direct	93 dB

GENERAL

Power Requirements	220 V
(50 Hz)	550 W
AC Outlets	3
Dimensions (WxHxD)	440x148x335mm
Weight (approx.)	9.9 kg

– Specifications and design are subject to change without notice. –

REFERENCE No. WM-570088

CABINET & CHASSIS PARTS LIST

Ref. No.	Part No.	Description	Q'ty
PACKAGE			
	620 000 0024	Bag Polyethylene	1
	620 186 6476	Pad (Front)	1
	620 186 6483	Pad (Rear)	1
	620 193 5394	Pad	1
	620 059 6596	Patching Sheet	1
	620 062 0543	Serial No. Sheet	2
	620 191 7253	Box Corrugate-Exp.	1
	620 148 8012	Sheet Polyethylene	1
ACCESSORIES			
	620 191 6522	REM-915 (Remote Control)	1
	620 057 8783	Bag Fan	1
	620 062 0543	Serial No. Sheet	1
	620 152 2624	Certificate Card	1
	620 191 6690	Explanatory Booklet	1
CABINET			
	620 062 0543	Serial No. Sheet	1
	620 125 8424	Wire Band	25
1	⚠ 620 017 1212	AC Socket	3
2	⚠ 620 023 7413	Power Cord	1
3	⚠ 620 191 2654	Power Trans	1
4	620 185 2752	Leg Assy	4
5	620 045 4711	Cover	1
6	620 191 4481	Cover Heat Sink	1
7	620 191 5129	Bracket Mount PC	1
8	620 051 2152	Screw Ground	1
9	620 052 1659	Rivet	6
10	620 052 4155	Cushion	1
11	620 189 5223	Cushion	1
12	620 053 2136	Bushing (Power Cord)	1
13	620 189 5230	Shelter	1
14	620 191 4504	Heat Sink	1
15	620 187 5683	Filter	1
16	620 191 4573	Cabinet Front Assy	1
17	620 186 6711	Knob Volume Assy	1
18	620 186 6896	Mount Filter Assy	1
19	620 191 4740	Panel Rear	1
20	620 186 7060	Bottom Cover	1
21	620 186 4014	Knob (Power)	1
22	620 185 3186	Knob Volume (Tone/Balance)	4
23	620 185 3216	Knob Push (Tape-3/Subsonic/Super Bass)	3
24	620 185 3223	Knob Push (Speaker A/B)	2
25	620 185 3230	Knob Tact (Muting/Power Standby/Loudness)	3
26	620 186 7237	Panel Front	1
27	620 186 7244	Chassis	1
28	620 186 7251	Metal Reinforce	1
29	620 186 7268	Metal Reinforce	1
30	620 185 3285	Bracket Mount H.P	1
31	620 123 0284	Screw, Bind Hd. Tapping-B, +M4X8	4
32	620 123 0833	Screw, Bind Hd. Tapping-C, +M4X10	4
33	405 017 7804	TR 2SC3281-O [Q1]	1
or	405 017 7903	TR 2SC3281-R [Q1]	1
33	405 017 7804	TR 2SC3281-O [Q2]	1
or	405 017 7903	TR 2SC3281-R [Q2]	1
34	405 003 4008	TR 2SA1302-O [Q3]	1
or	405 031 2205	TR 2SA1302-R [Q3]	1
34	405 003 4008	TR 2SA1302-O [Q4]	1
or	405 031 2205	TR 2SA1302-R [Q4]	1
35	405 031 2205	TR 2SA1302-R [Q5]	1
or	405 003 4008	TR 2SA1302-O [Q5]	1
36	405 017 7903	TR 2SC3281-R [Q6]	1
or	405 017 7804	TR 2SC3281-O [Q6]	1
37	620 048 4541	Metal Reinforce	4
41	620 188 8638	Micom P.C.B. Assy	1
42	620 191 7857	Phono EQ P.C.B. Assy	1
43	620 188 8652	Jumper P.C.B. Assy	1
44	620 191 3736	Remocon P.C.B. Assy	1
45	620 191 3743	Switch P.C.B. Assy	1
46	620 188 8713	SP-2 P.C.B. Assy	1
47	620 188 8690	Volume Ind. P.C.B. Assy	1
48	620 188 8720	Power Select P.C.B. Assy	1
49	620 191 3750	Main P.C.B. Assy	1
50	620 188 8744	Volume P.C.B. Assy	1
51	620 188 8751	Balance P.C.B. Assy	1
52	620 188 8768	Shieled-A P.C.B. Assy	1
53	620 188 8775	Shieled-B P.C.B. Assy	1
54	620 188 8782	Lamp P.C.B. Assy	1
55	620 188 8799	Bias Left P.C.B. Assy	1
56	620 188 8805	Bias Right P.C.B. Assy	1
57	620 191 2906	Sub Trans P.C.B. Assy	1
61	411 020 5201	SCR S-TPG BRZ 2.6X10	4
62	411 020 5904	SCR S-TPG BRZ 3X10	6
63	411 070 0607	SCR TPG BRZ 3X8	2
64	411 020 7700	SCR S-TPG BRZ 3X6	7
65	411 099 9704	SCR S-TPG BRZ 3X6	9
66	411 020 8004	SCR S-TPG BRZ 3X8	6
67	411 099 9803	SCR S-TPG BRZ 3X8	7
68	411 021 3107	SCR S-TPG BIN 2.6X8	5
69	411 021 3206	SCR S-TPG BIN 2.6X8	3
70	411 021 5705	SCR S-TPG BIN 3X6	17
71	411 003 8908	SCR PAN+SW 3X6	4
72	411 087 0102	WASHER IN TW 3	2

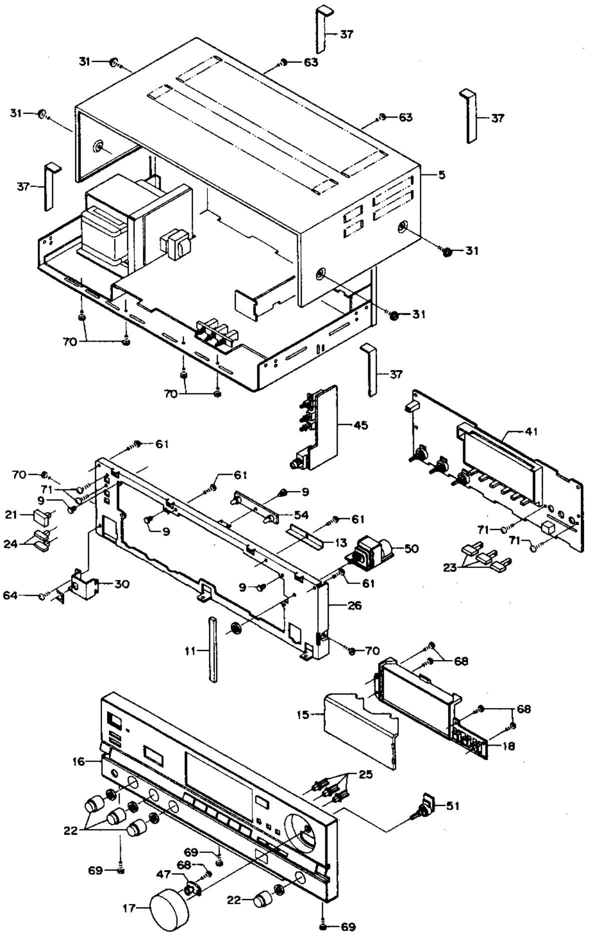
NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CABINET & CHASSIS EXPLODED VIEW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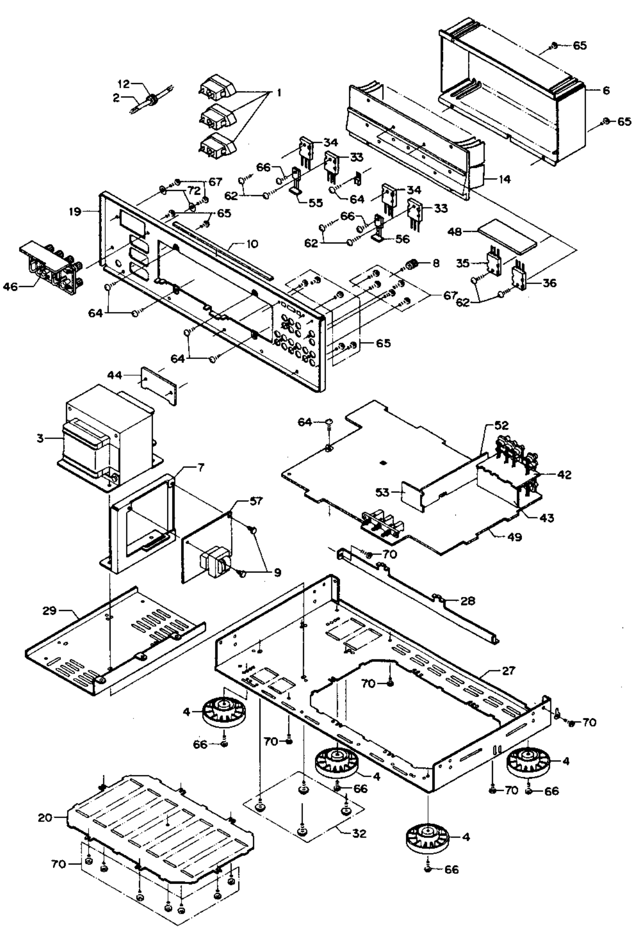
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POWER AMPLIFIER ADJUSTMENT

BEFORE ADJUSTMENT

Unplug the AC power cord and set the front panel controls as follows:

- Power switch to OFF position.
- Set the SPEAKERS switch to the OFF position.
- Turn the MASTER VOLUME Control to minimum.
- IDLING CURRENT ADJUSTMENT VR201/VR202 (on the Main P.C.Board) setting to mechanical center position.
- Connect the AC power cord and Power switch to the ON position.

IDLING CURRENT ADJUSTMENT

This adjustment is very sensitive to changes in ambient temperature. Allow set to operate for 2 minutes before attempting this alignment.

LEFT AMPLIFIER

1. Connect the DC Voltmeter between TP-1 and TP-3 on the Main P.C.Board.
2. Adjust the VR201 for an indication of 10mV ~ 20mV on the DC Voltmeter.

RIGHT AMPLIFIER

1. Connect the DC Voltmeter between TP-2 and TP-4 on the Main P.C.Board.
2. Adjust the VR202 for an indication of 10mV ~ 20mV on the DC Voltmeter.

P.C.BOARD PARTS LIST

Ref. No.	Part No.	Description	Q'ty
MICOM P.C.B. ASSY			
41	620 188 8638	Micom P.C.B. Assy	1
	620 182 6630	Digitron BG-581GK	1
	620 030 8137	Lamp	1
	411 021 3107	SCR S-TPG BIN 2.6X8	5
	620 052 0171	Spacer	1
	620 185 2806	Spacer (F,L)	1
	620 185 2813	Spacer (LED)	1
	620 186 7275	Plate Earth	1
	620 125 8424	Wire Band	1
CX401	620 192 1618	Crystal 4.19MHz	1
or	620 007 3257	Crystal 4.194304MHz	1
PC403	620 055 4879	Jumper	1
PC404	620 189 0839	Jumper	1
PC405	620 189 0815	Jumper	1
PC406	620 189 0846	Jumper	1
RB401	620 004 5513	Resistor 10K-7	1
RB402	620 004 5513	Resistor 10K-7	1
S401	620 016 7789	Tact Switch (PHONO)	1
S402	620 016 7789	Tact Switch (TUNER)	1
S403	620 016 7789	Tact Switch (COMPACT DISK)	1
S404	620 016 7789	Tact Switch (AUX)	1
S405	620 016 7789	Tact Switch (TAPE 1)	1
S406	620 016 7789	Tact Switch (DAT/TAPE 2)	1
S407	620 016 7789	Tact Switch (MUTING)	1
S408	620 016 7789	Tact Switch (LOUDNESS)	1
S409	620 016 7789	Tact Switch (SOURCE DIRECT)	1
S410	620 016 7789	Tact Switch (POWER STANDBY)	1
VR401	620 189 0211	Volume (W-150kΩx2, BASS)	1
VR402	620 189 0211	Volume (W-150kΩx2, MID RANGE)	1
VR403	620 189 0211	Volume (W-150kΩx2, TREBLE)	1
IC401	410 053 6209	IC TMP47C670N-1264	1
IC402	409 114 4803	IC LB1641	1
Q401	405 018 0101	TR 2SC3331-T	1
Q402	405 018 0101	TR 2SC3331-T	1
Q403	405 018 0101	TR 2SC3331-T	1
Q404	405 018 0101	TR 2SC3331-T	1
Q405	405 012 8608	TR 2SC2021-S	1
Q406	405 012 8608	TR 2SC2021-S	1
Q407	405 012 8608	TR 2SC2021-S	1
Q408	405 012 8608	TR 2SC2021-S	1
Q409	405 012 8608	TR 2SC2021-S	1
Q410	405 012 8608	TR 2SC2021-S	1
Q411	405 004 5004	TR 2SA608-G-NP	1
Q412	405 019 3804	TR 2SC536-G-NP	1
Q413	405 019 2708	TR 2SC536-F-NP	1
Q414	405 004 5004	TR 2SA608-G-NP	1
Q415	405 004 5004	TR 2SA608-G-NP	1
Q416	405 019 3804	TR 2SC536-G-NP	1
Q418	405 021 0808	TR 2SD1012-H	1
Q419	405 034 6705	TR DTA114-EF	1
Q420	405 034 6705	TR DTA114-EF	1
Q421	405 034 6705	TR DTA114-EF	1
D401	407 005 3805	DIODE DS442-BT	1
D402	407 005 3805	DIODE DS442-BT	1
D403	407 005 3805	DIODE DS442-BT	1
D404	407 005 3805	DIODE DS442-BT	1
D405	407 005 3805	DIODE DS442-BT	1
D406	407 005 3805	DIODE DS442-BT	1
D407	407 005 3805	DIODE DS442-BT	1
D408	407 005 3805	DIODE DS442-BT	1
D409	407 005 3805	DIODE DS442-BT	1
D410	407 005 3805	DIODE DS442-BT	1
D411	407 008 0405	DIODE GMB01-BT	1
D412	407 005 3805	DIODE DS442-BT	1
D414	407 069 1205	DIODE DS441	1
D415	407 005 3805	DIODE DS442-BT	1
D416	407 005 3805	DIODE DS442-BT	1
D417	407 008 0405	DIODE GMB01-BT	1
D418	407 008 0405	DIODE GMB01-BT	1
D419	407 008 0405	DIODE GMB01-BT	1
D420	407 008 0405	DIODE GMB01-BT	1
D421	407 008 0405	DIODE GMB01-BT	1
D422	407 008 0405	DIODE GMB01-BT	1
D423	407 008 0405	DIODE GMB01-BT	1
D424	407 008 0405	DIODE GMB01-BT	1
D425	407 050 3300	ZENER DIODE GZA4.3X	1
D426	407 008 0405	DIODE GMB01-BT	1
D427	407 030 3108	LED SLP-251B-50	1
D428	407 030 3108	LED SLP-251B-50	1
D429	407 030 3108	LED SLP-251B-50	1
D430	407 030 3108	LED SLP-251B-50	1
D431	407 027 5207	LED SLP-151B-50	1
D432	407 027 5207	LED SLP-151B-50	1
D433	407 109 1301	LED SEL1122P	1
D435	407 102 2800	SENSOR SBX1492-52	1
C401	403 044 8207	ELECT 10U M 25V	1
C402	403 044 8207	ELECT 10U M 25V	1
C403	403 059 5802	POLYESTER 0.022U J 50V	1
C404	403 059 5802	POLYESTER 0.022U J 50V	1
C405	403 063 8103	POLYESTER 0.082U K 50V	1
C406	403 063 8103	POLYESTER 0.082U K 50V	1
C407	403 061 8006	POLYESTER 4700P J 50V	1
C408	403 061 8006	POLYESTER 4700P J 50V	1
C409	403 057 7402	POLYESTER 0.012U J 50V	1
C410	403 057 7402	POLYESTER 0.012U J 50V	1
C411	403 044 8207	ELECT 10U M 25V	1
C412	403 044 8207	ELECT 10U M 25V	1
C415	403 001 1906	CERAMIC 0.01U M 16V	1
C416	404 039 4402	ELECT 100U M 10V	1
C417	404 039 4303	ELECT 2200U M 10V	1
C418	403 026 0809	CERAMIC 47P J 50V	1
C419	403 026 0809	CERAMIC 47P J 50V	1
C420	403 049 1609	ELECT 1U M 50V	1
C421	403 049 1609	ELECT 1U M 50V	1
C422	403 038 7209	ELECT 220U M 6.3V	1
C423	403 045 0606	ELECT 100U M 25V	1
C424	403 069 8404	CERAMIC 0.01U Z 50V	1
C425	403 067 5603	MT-COMPO 0.1U J 50V	1
C426	403 038 2303	ELECT 100U M 6.3V	1
C427	403 001 1906	CERAMIC 0.01U M 16V	1
C428	403 001 1906	CERAMIC 0.01U M 16V	1
C429	403 001 1906	CERAMIC 0.01U M 16V	1
C430	404 028 9302	CERAMIC 0.1U Z 50V	1
R401	401 025 2305	CARBON 150K JA 1/6W	1
R402	401 025 2305	CARBON 150K JA 1/6W	1
R403	401 026 7408	CARBON 39K JA 1/6W	1
R404	401 026 7408	CARBON 39K JA 1/6W	1
R405	401 027 8305	CARBON 820 JA 1/6W	1
R406	401 027 8305	CARBON 820 JA 1/6W	1
R407	401 025 1605	CARBON 1.5K JA 1/6W	1
R408	401 025 1605	CARBON 1.5K JA 1/6W	1
R409	401 026 6609	CARBON 390 JA 1/6W	1
R410	401 026 6609	CARBON 390 JA 1/6W	1
R411	401 026 6609	CARBON 390 JA 1/6W	1
R412	401 026 6609	CARBON 390 JA 1/6W	1
R413	401 027 2600	CARBON 5.6K JA 1/6W	1
R414	401 027 2600	CARBON 5.6K JA 1/6W	1
R415	401 027 2600	CARBON 5.6K JA 1/6W	1
R416	401 027 2600	CARBON 5.6K JA 1/6W	1
R417	401 013 5301	CARBON 1.2K JA 1/4W	1
R418	401 024 9305	CARBON 1.2K JA 1/6W	1
R421	401 020 0801	CARBON 470 JA 1/4W	1
R423	401 012 7009	CARBON 10K JA 1/4W	1
R424	401 024 7400	CARBON 10K JA 1/6W	1
R425	401 024 7400	CARBON 10K JA 1/6W	1
R426	401 027 0309	CARBON 47K JA 1/6W	1
R427	401 027 0507	CARBON 470K JA 1/6W	1
R428	401 024 7707	CARBON 100K JA 1/6W	1
R429	401 024 7004	CARBON 1K JA 1/6W	1
R430	401 016 3809	CARBON 2.2K JA 1/4W	1
R431	401 013 9507	CARBON 1.3K JA 1/4W	1
R432	401 024 7400	CARBON 10K JA 1/6W	1
R433	401 024 9305	CARBON 1.2K JA 1/6W	1
R434	401 012 8105	CARBON 100K JA 1/4W	1
R435	401 012 8105	CARBON 100K JA 1/4W	1
R436	401 012 7009	CARBON 10K JA 1/4W	1
R437	401 026 3905	CARBON 330 JA 1/6W	1
R438	401 026 3905	CARBON 330 JA 1/6W	1
R439	401 023 0709	CARBON 82 JA 1/4W	1
R440	401 023 3700	CARBON 82K JA 1/4W	1
R441	401 023 3700	CARBON 82K JA 1/4W	1
R442	401 023 3700	CARBON 82K JA 1/4W	1
R443	401 023 3700	CARBON 82K JA 1/4W	1
R444	401 023 3700	CARBON 82K JA 1/4W	1
R445	401 023 3700	CARBON 82K JA 1/4W	1
R446	401 013 6407	CARBON 12K JA 1/4W	1
R447	401 013 3208	CARBON 12 JA 1/4W	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
R448	401 013 3208	CARBON 12 JA 1/4W	1
R449	401 024 7004	CARBON 1K JA 1/6W	1
R450	401 024 7004	CARBON 1K JA 1/6W	1
R451	401 024 7004	CARBON 1K JA 1/6W	1
R452	401 012 5708	CARBON 1K JA 1/4W	1
R453	401 012 5708	CARBON 1K JA 1/4W	1
R454	401 012 5708	CARBON 1K JA 1/4W	1
R455	401 024 7004	CARBON 1K JA 1/6W	1
R456	401 024 7004	CARBON 1K JA 1/6W	1
R457	401 024 7707	CARBON 100K JA 1/6W	1
R458	401 024 7707	CARBON 100K JA 1/6W	1
R459	401 027 5908	CARBON 68K JA 1/6W	1
R460	401 022 4104	CARBON 68K JA 1/4W	1
R461	401 012 7009	CARBON 10K JA 1/4W	1
R462	401 024 7400	CARBON 10K JA 1/6W	1
R463	401 027 0309	CARBON 47K JA 1/6W	1
R464	401 012 5708	CARBON 1K JA 1/4W	1
R465	401 012 5708	CARBON 1K JA 1/4W	1
R466	401 026 9600	CARBON 470 JA 1/6W	1
R467	401 025 7805	CARBON 2.2K JA 1/6W	1
R468	401 012 3407	CARBON 10 JA 1/4W	1
R469	401 012 7009	CARBON 10K JA 1/4W	1
R470	401 027 0309	CARBON 47K JA 1/6W	1
R471	401 027 0309	CARBON 47K JA 1/6W	1
R472	401 018 3807	CARBON 3.3K JA 1/4W	1
R473	401 012 7009	CARBON 10K JA 1/4W	1

PHONO EQ P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
42	620 191 7857	Phono EQ P.C.B. Assy	1
	620 188 9918	Pin Jack 2P Black	1
	620 188 9932	Pin Jack 6P Black	1
W101	620 017 5784	Connector 1P Assy	1
IC101	409 057 4403	IC UPC4570C	1
C101	403 071 6207	CERAMIC 220P K 50V	1
C102	403 071 6207	CERAMIC 220P K 50V	1
C103	403 047 1502	ELECT 4.7U M 25V	1
C104	403 047 1502	ELECT 4.7U M 25V	1
C105	403 071 6207	CERAMIC 220P K 50V	1
C106	403 071 6207	CERAMIC 220P K 50V	1
C107	403 038 7209	ELECT 220U M 6.3V	1
C108	403 038 7209	ELECT 220U M 6.3V	1
C109	403 062 7305	POLYESTER 0.056U K 50V	1
C110	403 062 7305	POLYESTER 0.056U K 50V	1
C111	403 058 3106	POLYESTER 0.015U J 50V	1
C112	403 058 3106	POLYESTER 0.015U J 50V	1
C113	403 074 2701	CERAMIC 0.047U Z 50V	1
C115	403 071 2001	CERAMIC 180P K 50V	1
C116	403 071 2001	CERAMIC 180P K 50V	1
R101	401 024 7004	CARBON 1K JA 1/6W	1
R102	401 024 7004	CARBON 1K JA 1/6W	1
R103	401 024 7004	CARBON 1K JA 1/6W	1
R104	401 024 7004	CARBON 1K JA 1/6W	1
R105	401 024 7004	CARBON 1K JA 1/6W	1
R106	401 024 7004	CARBON 1K JA 1/6W	1
R107	401 024 7004	CARBON 1K JA 1/6W	1
R108	401 024 7004	CARBON 1K JA 1/6W	1
R109	401 025 8703	CARBON 220K JA 1/6W	1
R110	401 025 8703	CARBON 220K JA 1/6W	1
R111	401 025 8703	CARBON 220K JA 1/6W	1
R112	401 025 8703	CARBON 220K JA 1/6W	1
R113	401 025 8703	CARBON 220K JA 1/6W	1
R114	401 025 8703	CARBON 220K JA 1/6W	1
R115	401 024 7707	CARBON 100K JA 1/6W	1
R116	401 024 7707	CARBON 100K JA 1/6W	1
R117	401 024 7707	CARBON 100K JA 1/6W	1
R118	401 024 7707	CARBON 100K JA 1/6W	1
R119	401 024 6700	CARBON 100 JA 1/6W	1
R120	401 024 6700	CARBON 100 JA 1/6W	1
R121	401 027 3003	CARBON 56K JA 1/6W	1
R122	401 027 3003	CARBON 56K JA 1/6W	1
R123	401 026 9907	CARBON 4.7K JA 1/6W	1
R124	401 026 9907	CARBON 4.7K JA 1/6W	1

JUMPER P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
43	620 188 8652	Jumper P.C.B. Assy	1
C131	403 047 1502	ELECT 4.7U M 25V	1
C132	403 047 1502	ELECT 4.7U M 25V	1
C133	403 047 4206	ELECT 47U M 25V	1
C134	403 047 4206	ELECT 47U M 25V	1

Ref. No.	Part No.	Description	Q'ty
R125	401 024 7004	CARBON 1K JA 1/6W	1
R126	401 012 5708	CARBON 1K JA 1/4W	1
R127	401 024 7707	CARBON 100K JA 1/6W	1
R128	401 024 7707	CARBON 100K JA 1/6W	1
R129	401 026 3905	CARBON 330 JA 1/6W	1
R130	401 026 3905	CARBON 330 JA 1/6W	1

REMOCON P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
44	620 191 3736	Remocon P.C.B. Assy	1
	620 021 1970	Plug 2P	1
	620 021 5923	Plug 3P	1
	620 021 5930	Plug 4P	2
	620 185 3292	Bracket Connect PC	1
PC307	620 189 3878	Jumper	1
PC313	620 190 1719	Jumper	1

SWITCH P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
45	620 191 3743	Switch P.C.B. Assy	1
S503 ⚠	620 015 2341	Switch Push Power	1
	620 185 1946	Jack 3P	1
	620 031 4763	Wire Wrap Terminal	2
	620 053 6899	Cover Safety	1
C501 ⚠	620 006 6716	Capacitor 1000P 400V	1
PC511	620 189 0761	Wire 5 Parallel	1
PC512	620 024 2998	Wire 6 Parallel	1
S501	620 188 8393	Push 1KEY (SPEAKERS A)	1
S502	620 188 8393	Push 1KEY (SPEAKERS B)	1
R501	401 069 2705	OXIDE-MT 680 JB 2W	1
R502	401 069 2705	OXIDE-MT 680 JB 2W	1
R503	401 017 0807	CARBON 270 JA 1/4W	1
R504	401 017 0807	CARBON 270 JA 1/4W	1
R505	401 017 0807	CARBON 270 JA 1/4W	1
R506	401 017 0807	CARBON 270 JA 1/4W	1

SP-2 P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
46	620 188 8713	SP-2 P.C.B. Assy	1
	620 191 4375	SP Terminal 8P	1
C525	403 074 6303	CERAMIC 560P K 50V	1
C526	403 074 6303	CERAMIC 560P K 50V	1
C527	403 074 6303	CERAMIC 560P K 50V	1
C528	403 074 6303	CERAMIC 560P K 50V	1
C529	403 026 2209	CERAMIC 47P J 50V	1
C530	403 026 2209	CERAMIC 47P J 50V	1

VOLUME IND. P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
47	620 188 8690	Volume Ind. P.C.B. Assy	1
	620 185 2820	Reflector	1
D301	407 062 7204	LED SEL2213C	1

POWER SELECT P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
48	620 188 8720	Power Select P.C.B. Assy	1
PC515	620 055 4930	Jumper	1
PC516	620 024 2608	Wire 4 Parallel	1
Q511	405 013 7006	TR 2SC2274-F	1
Q512	405 006 6702	TR 2SA984-F	1
Q513	405 003 1601	TR 2SA1249-S	1
Q514	405 017 2601	TR 2SC3117-S	1
D511	407 005 4703	DIODE DS446-BT	1
D512	407 005 4703	DIODE DS446-BT	1
D513	407 005 4703	DIODE DS446-BT	1
D514	407 005 4703	DIODE DS446-BT	1
C511	403 026 2209	CERAMIC 47P J 50V	1
C512	403 026 2209	CERAMIC 47P J 50V	1
C513	403 071 6207	CERAMIC 220P K 50V	1
C514	403 071 6207	CERAMIC 220P K 50V	1
C515	404 012 7000	CERAMIC 0.01U P 500V	1
R511	401 021 3009	CARBON 5.6K JA 1/4W	1
R512	401 021 3009	CARBON 5.6K JA 1/4W	1
R513	401 012 5708	CARBON 1K JA 1/4W	1
R514	401 012 5708	CARBON 1K JA 1/4W	1
R515	401 014 4105	CARBON 1.5K JA 1/4W	1
R516	401 014 4105	CARBON 1.5K JA 1/4W	1
R517	401 014 4105	CARBON 1.5K JA 1/4W	1
R518	401 014 4105	CARBON 1.5K JA 1/4W	1
R519	401 027 0507	CARBON 470K JA 1/6W	1
R520	401 027 0507	CARBON 470K JA 1/6W	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
MAIN P.C.B. ASSY			
49	620 191 3750	Main P.C.B. Assy	1
	620 188 8300	Main P.C.B.	1
	620 189 0259	Push 3KEY (TAPE-3/SUBSONIC FILTER/ SUPER BASS)	1
	620 017 0406	Relay	1
	620 017 0413	Relay	1
	620 017 2738	Fuse Clip	10
	620 188 9925	Pin Jack 4P Black	3
	⚠ 423 006 4702	FUSE 250V T 2.5A	1
	⚠ 423 006 8700	FUSE 250V T3.15A	2
	⚠ 423 007 7702	FUSE 250V T6.3A	2
	620 031 4763	Wire Wrap Terminal	17
	620 053 6899	Cover Safety	1
	620 053 9241	Plate Heat Sink	8
	620 054 8175	Label	1
	620 101 2316	Label (Fuse)	1
	620 186 7275	Plate Earth	1
CN203	620 020 3753	Socket Jumper 7P	1
CN204	620 020 5825	Socket Jumper 8P	1
CN205	620 020 5801	Socket Jumper 5P	1
CN206	620 018 1884	Socket Jumper 10P	1
C302	620 006 8383	Elect 8200MF 75V	1
C303	620 006 8383	Elect 8200MF 75V	1
C319	⚠ 620 006 6679	Capacitor 0.01MF400V	1
L201	620 027 1240	AF Coil (2μH)	1
L202	620 027 1240	AF Coil (2μH)	1
VR201	620 005 6212	Potentiometer 301	1
VR202	620 005 6212	Potentiometer 301	1
IC201	409 109 5105	IC LC7821	1
IC202	409 018 4503	IC LA6458DS	1
IC203	409 018 4503	IC LA6458DS	1
IC204	409 018 4503	IC LA6458DS	1
IC205	409 161 3101	IC TC9214P	1
IC206	409 161 3101	IC TC9214P	1
IC207	409 057 4403	IC UPC4570C	1
IC209	409 079 9509	IC LA2500	1
IC210	409 079 9509	IC LA2500	1
IC211	409 018 4503	IC LA6458DS	1
Q201	405 018 0101	TR 2SC3331-T	1
Q202	405 018 0101	TR 2SC3331-T	1
Q203	405 021 0808	TR 2SD1012-H	1
Q204	405 021 0808	TR 2SD1012-H	1
Q205	405 016 9007	TR 2SC3066-G	1
Q206	405 016 9007	TR 2SC3066-G	1
Q207	405 002 9202	TR 2SA1209-T	1
Q208	405 002 9202	TR 2SA1209-T	1
Q209	405 016 4002	TR 2SC2911-T	1
Q210	405 016 4002	TR 2SC2911-T	1
Q213	405 019 3804	TR 2SC536-G-NP	1
Q214	405 019 3804	TR 2SC536-G-NP	1
Q215	405 004 5004	TR 2SA608-G-NP	1
Q216	405 004 5004	TR 2SA608-G-NP	1
Q217	405 017 2601	TR 2SC3117-S	1
Q218	405 017 2601	TR 2SC3117-S	1
Q219	405 003 1601	TR 2SA1249-S	1
Q220	405 003 1601	TR 2SA1249-S	1
Q221	405 004 5004	TR 2SA608-G-NP	1
Q222	405 019 3804	TR 2SC536-G-NP	1
Q223	405 019 3804	TR 2SC536-G-NP	1
Q224	405 019 3804	TR 2SC536-G-NP	1
Q225	405 004 5004	TR 2SA608-G-NP	1
Q226	405 019 3804	TR 2SC536-G-NP	1
Q227	405 023 8505	TR 2SD438-F-MP	1
Q228	405 004 5004	TR 2SA608-G-NP	1
Q229	405 007 5308	TR 2SB560-F-MP	1
Q230	405 019 3804	TR 2SC536-G-NP	1
Q231	405 019 3804	TR 2SC536-G-NP	1
Q232	405 004 5004	TR 2SA608-G-NP	1
Q233	405 022 8209	TR 2SD1682-T	1
Q234	405 025 0200	TR 2SD734-G	1
Q235	405 019 3804	TR 2SC536-G-NP	1
	407 065 0707	THERMISTOR ZPP221E501A	1
D201	407 008 0405	DIODE GMB01-BT	1
D202	407 008 0405	DIODE GMB01-BT	1
D203	407 008 0405	DIODE GMB01-BT	1
D204	407 008 0405	DIODE GMB01-BT	1
D205	407 008 0405	DIODE GMB01-BT	1
D206	407 008 0405	DIODE GMB01-BT	1

Ref. No.	Part No.	Description	Q'ty
D207	407 008 0405	DIODE GMB01-BT	1
D208	407 008 0405	DIODE GMB01-BT	1
D209	407 008 0405	DIODE GMB01-BT	1
D210	407 008 0405	DIODE GMB01-BT	1
D211	407 008 0405	DIODE GMB01-BT	1
D212	407 008 0405	DIODE GMB01-BT	1
D213	407 008 0405	DIODE GMB01-BT	1
D214	407 008 0405	DIODE GMB01-BT	1
D215	407 005 4703	DIODE DS446-BT	1
D216	407 005 4703	DIODE DS446-BT	1
D217	407 005 4703	DIODE DS446-BT	1
D218	407 005 4703	DIODE DS446-BT	1
D219	407 050 1405	ZENER DIODE GZA3.6Z	1
D220	407 050 1405	ZENER DIODE GZA3.6Z	1
D221	407 008 0405	DIODE GMB01-BT	1
D222	407 008 0405	DIODE GMB01-BT	1
D223	407 092 3900	DIODE DSB15TC-KC5	1
D224	407 092 3900	DIODE DSB15TC-KC5	1
D225	407 092 3900	DIODE DSB15TC-KC5	1
D226	407 092 3900	DIODE DSB15TC-KC5	1
D227	407 088 3105	DIODE DSC30TC-KD2	1
D228	407 088 3105	DIODE DSC30TC-KD2	1
D229	407 088 3105	DIODE DSC30TC-KD2	1
D230	407 088 3105	DIODE DSC30TC-KD2	1
D231	407 008 0405	DIODE GMB01-BT	1
D232	407 008 0405	DIODE GMB01-BT	1
D233	407 049 7807	ZENER DIODE GZA18Y-BT	1
D234	407 008 0405	DIODE GMB01-BT	1
D235	407 008 0405	DIODE GMB01-BT	1
D236	407 049 7807	ZENER DIODE GZA18Y-BT	1
D237	407 050 6301	ZENER DIODE GZA6.2Z-BT	1
D238	407 049 9801	ZENER DIODE GZA22Y	1
D239	407 005 3805	DIODE DS442-BT	1
D240	407 004 9105	DIODE DSF10C-BT	1
D245	407 050 6301	ZENER DIODE GZA6.2Z-BT	1
D246	407 005 3805	DIODE DS442-BT	1
D247	407 004 9105	DIODE DSF10C-BT	1
D248	407 050 0903	ZENER DIODE GZA3.3X	1
D249	407 049 7807	ZENER DIODE GZA18Y-BT	1
D251	407 088 3105	DIODE DSC30TC-KD2	1
D252	407 088 3105	DIODE DSC30TC-KD2	1
D253	407 008 0405	DIODE GMB01-BT	1
D254	407 008 0405	DIODE GMB01-BT	1
TH201	407 109 6702	THERMISTOR 300D-5	1
TH202	407 109 6702	THERMISTOR 300D-5	1
C201	403 047 1502	ELECT 4.7U M 25V	1
C202	403 047 1502	ELECT 4.7U M 25V	1
C203	403 071 6207	CERAMIC 220P K 50V	1
C204	403 071 6207	CERAMIC 220P K 50V	1
C205	403 047 1502	ELECT 4.7U M 25V	1
C206	403 047 1502	ELECT 4.7U M 25V	1
C207	403 047 1502	ELECT 4.7U M 25V	1
C208	403 047 1502	ELECT 4.7U M 25V	1
C209	403 071 6207	CERAMIC 220P K 50V	1
C210	403 071 6207	CERAMIC 220P K 50V	1
C211	403 047 1502	ELECT 4.7U M 25V	1
C212	403 047 1502	ELECT 4.7U M 25V	1
C213	403 047 4206	ELECT 47U M 25V	1
C214	403 047 4206	ELECT 47U M 25V	1
C215	403 049 1609	ELECT 1U M 50V	1
C217	403 071 6207	CERAMIC 220P K 50V	1
C218	403 071 6207	CERAMIC 220P K 50V	1
C219	403 047 4206	ELECT 47U M 25V	1
C220	403 047 4206	ELECT 47U M 25V	1
C221	403 067 6709	MT-COMPO 0.22U J 50V	1
C222	403 067 6709	MT-COMPO 0.22U J 50V	1
C223	403 067 6709	MT-COMPO 0.22U J 50V	1
C224	403 067 6709	MT-COMPO 0.22U J 50V	1
C225	403 047 1502	ELECT 4.7U M 25V	1
C226	403 047 1502	ELECT 4.7U M 25V	1
C227	403 068 9402	CERAMIC 100P K 50V	1
C228	403 068 9402	CERAMIC 100P K 50V	1
C229	403 068 9402	CERAMIC 100P K 50V	1
C230	403 068 9402	CERAMIC 100P K 50V	1
C231	403 047 1502	ELECT 4.7U M 25V	1
C232	403 047 1502	ELECT 4.7U M 25V	1
C233	403 073 7004	CERAMIC 470P K 50V	1
C234	403 073 7004	CERAMIC 470P K 50V	1
C235	403 067 5900	MT-COMPO 0.12U J 50V	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description				Q'ty
C236	403 067 5900	MT-COMPO	0.12U	J	50V	1
C237	403 071 6207	CERAMIC	220P	K	50V	1
C238	403 071 6207	CERAMIC	220P	K	50V	1
C239	403 045 0606	ELECT	100U	M	25V	1
C240	403 045 0606	ELECT	100U	M	25V	1
C241	403 049 1609	ELECT	1U	M	50V	1
C242	403 049 1609	ELECT	1U	M	50V	1
C243	403 058 3106	POLYESTER	0.015U	J	50V	1
C244	403 058 3106	POLYESTER	0.015U	J	50V	1
C245	403 047 1502	ELECT	4.7U	M	25V	1
C246	403 047 1502	ELECT	4.7U	M	25V	1
C247	403 071 6207	CERAMIC	220P	K	50V	1
C248	403 071 6207	CERAMIC	220P	K	50V	1
C249	403 040 4807	ELECT	220U	M	10V	1
C250	403 040 4807	ELECT	220U	M	10V	1
C251	403 070 7809	CERAMIC	150P	K	50V	1
C252	403 070 7809	CERAMIC	150P	K	50V	1
C253	403 044 8207	ELECT	10U	M	25V	1
C254	403 044 8207	ELECT	10U	M	25V	1
C255	403 044 0201	ELECT	47U	M	16V	1
C256	403 044 0201	ELECT	47U	M	16V	1
C257	403 035 2207	CERAMIC	15P	K	500V	1
C258	403 035 2207	CERAMIC	15P	K	500V	1
C259	403 035 2207	CERAMIC	15P	K	500V	1
C260	403 035 2207	CERAMIC	15P	K	500V	1
C261	403 035 8506	CERAMIC	3P	C	500V	1
C262	403 035 8506	CERAMIC	3P	C	500V	1
C263	403 061 8006	POLYESTER	4700P	J	50V	1
C264	403 061 8006	POLYESTER	4700P	J	50V	1
C265	403 057 7402	POLYESTER	0.012U	J	50V	1
C266	403 057 7402	POLYESTER	0.012U	J	50V	1
C267	403 057 7402	POLYESTER	0.012U	J	50V	1
C268	403 057 7402	POLYESTER	0.012U	J	50V	1
C269	403 034 9900	CERAMIC	100P	K	500V	1
C270	403 034 9900	CERAMIC	100P	K	500V	1
C271	403 034 9900	CERAMIC	100P	K	500V	1
C272	403 034 9900	CERAMIC	100P	K	500V	1
C273	403 036 6600	CERAMIC	8P	D	500V	1
C274	403 036 6600	CERAMIC	8P	D	500V	1
C275	403 062 0900	POLYESTER	0.047U	K	50V	1
C276	403 062 0900	POLYESTER	0.047U	K	50V	1
C277	403 054 9706	ELECT	47U	M	100V	1
C278	403 054 9706	ELECT	47U	M	100V	1
C279	403 054 9706	ELECT	47U	M	100V	1
C280	403 054 9706	ELECT	47U	M	100V	1
C281	403 068 9402	CERAMIC	100P	K	50V	1
C282	403 068 9402	CERAMIC	100P	K	50V	1
C283	404 012 7000	CERAMIC	0.01U	P	500V	1
C284	404 012 7000	CERAMIC	0.01U	P	500V	1
C285	403 049 1609	ELECT	1U	M	50V	1
C286	403 049 1609	ELECT	1U	M	50V	1
C287	403 042 0302	ELECT	10U	M	16V	1
C288	403 042 0302	ELECT	10U	M	16V	1
C289	403 041 3304	ELECT	47U	M	10V	1
C290	403 042 0302	ELECT	10U	M	16V	1
C291	403 042 0302	ELECT	10U	M	16V	1
C292	404 012 7000	CERAMIC	0.01U	P	500V	1
C293	404 012 7000	CERAMIC	0.01U	P	500V	1
C294	404 012 7000	CERAMIC	0.01U	P	500V	1
C295	404 012 7000	CERAMIC	0.01U	P	500V	1
C296	403 053 8908	ELECT	3300U	M	35V	1
C297	403 053 8908	ELECT	3300U	M	35V	1
C298	404 012 7000	CERAMIC	0.01U	P	500V	1
C299	404 012 7000	CERAMIC	0.01U	P	500V	1
C300	404 012 7000	CERAMIC	0.01U	P	500V	1
C301	404 012 7000	CERAMIC	0.01U	P	500V	1
C304	403 044 8207	ELECT	10U	M	25V	1
C305	403 044 8207	ELECT	10U	M	25V	1
C306	403 044 8207	ELECT	10U	M	25V	1
C307	403 044 8207	ELECT	10U	M	25V	1
C308	403 042 0302	ELECT	10U	M	16V	1
C309	403 039 7802	ELECT	100U	M	10V	1
C310	403 044 8207	ELECT	10U	M	25V	1
C311	403 045 0606	ELECT	100U	M	25V	1
C317	403 042 0302	ELECT	10U	M	16V	1
C318	403 039 7802	ELECT	100U	M	10V	1
C321	403 068 9402	CERAMIC	100P	K	50V	1
C322	403 068 9402	CERAMIC	100P	K	50V	1
C323	403 035 4508	CERAMIC	2P	C	500V	1

Ref. No.	Part No.	Description				Q'ty
C324	403 035 4508	CERAMIC	2P	C	500V	1
C325	403 047 1502	ELECT	4.7U	M	25V	1
C326	403 044 8207	ELECT	10U	M	25V	1
C329	403 009 3100	CERAMIC	100P	J	50V	1
C330	403 009 3100	CERAMIC	100P	J	50V	1
C331	403 006 4209	CERAMIC	1P	C	50V	1
C332	403 006 4209	CERAMIC	1P	C	50V	1
C333	404 012 7000	CERAMIC	0.01U	P	500V	1
C345	403 068 9402	CERAMIC	100P	K	50V	1
C346	403 068 9402	CERAMIC	100P	K	50V	1
C347	403 068 9402	CERAMIC	100P	K	50V	1
C348	403 068 9402	CERAMIC	100P	K	50V	1
C349	403 068 9402	CERAMIC	100P	K	50V	1
C350	403 068 9402	CERAMIC	100P	K	50V	1
C351	403 068 9402	CERAMIC	100P	K	50V	1
C352	403 068 9402	CERAMIC	100P	K	50V	1
R201	401 024 7004	CARBON	1K	JA	1/6W	1
R202	401 024 7004	CARBON	1K	JA	1/6W	1
R203	401 024 7004	CARBON	1K	JA	1/6W	1
R204	401 024 7004	CARBON	1K	JA	1/6W	1
R205	401 024 7004	CARBON	1K	JA	1/6W	1
R206	401 024 7004	CARBON	1K	JA	1/6W	1
R207	401 024 7004	CARBON	1K	JA	1/6W	1
R208	401 024 7004	CARBON	1K	JA	1/6W	1
R209	401 024 7004	CARBON	1K	JA	1/6W	1
R210	401 024 7004	CARBON	1K	JA	1/6W	1
R211	401 024 7004	CARBON	1K	JA	1/6W	1
R212	401 024 7004	CARBON	1K	JA	1/6W	1
R213	401 025 0004	CARBON	120K	JA	1/6W	1
R214	401 025 0004	CARBON	120K	JA	1/6W	1
R215	401 025 8703	CARBON	220K	JA	1/6W	1
R216	401 025 8703	CARBON	220K	JA	1/6W	1
R217	401 027 9005	CARBON	82K	JA	1/6W	1
R218	401 027 9005	CARBON	82K	JA	1/6W	1
R219	401 025 8703	CARBON	220K	JA	1/6W	1
R220	401 025 8703	CARBON	220K	JA	1/6W	1
R221	401 024 7707	CARBON	100K	JA	1/6W	1
R222	401 024 7707	CARBON	100K	JA	1/6W	1
R223	401 024 7707	CARBON	100K	JA	1/6W	1
R224	401 024 7707	CARBON	100K	JA	1/6W	1
R225	401 024 7707	CARBON	100K	JA	1/6W	1
R226	401 024 7707	CARBON	100K	JA	1/6W	1
R227	401 024 7707	CARBON	100K	JA	1/6W	1
R228	401 024 7707	CARBON	100K	JA	1/6W	1
R229	401 027 0507	CARBON	470K	JA	1/6W	1
R230	401 027 0507	CARBON	470K	JA	1/6W	1
R231	401 025 8703	CARBON	220K	JA	1/6W	1
R232	401 025 8703	CARBON	220K	JA	1/6W	1
R233	401 012 5708	CARBON	1K	JA	1/4W	1
R234	401 012 5708	CARBON	1K	JA	1/4W	1
R235	401 018 2800	CARBON	330	JA	1/4W	1
R236	401 018 2800	CARBON	330	JA	1/4W	1
R237	401 024 7400	CARBON	10K	JA	1/6W	1
R241	401 026 1307	CARBON	27K	JA	1/6W	1
R242	401 026 1307	CARBON	27K	JA	1/6W	1
R243	401 025 0004	CARBON	120K	JA	1/6W	1
R244	401 025 0004	CARBON	120K	JA	1/6W	1
R245	401 024 7707	CARBON	100K	JA	1/6W	1
R246	401 024 7707	CARBON	100K	JA	1/6W	1
R247	401 026 4308	CARBON	3.3K	JA	1/6W	1
R248	401 026 4308	CARBON	3.3K	JA	1/6W	1
R249	401 026 1000	CARBON	2.7K	JA	1/6W	1
R250	401 026 1000	CARBON	2.7K	JA	1/6W	1
R251	401 024 7400	CARBON	10K	JA	1/6W	1
R252	401 024 7400	CARBON	10K	JA	1/6W	1
R253	401 027 2600	CARBON	5.6K	JA	1/6W	1
R254	401 027 2600	CARBON	5.6K	JA	1/6W	1
R255	401 025 8703	CARBON	220K	JA	1/6W	1
R256	401 025 8703	CARBON	220K	JA	1/6W	1
R257	401 025 8703	CARBON	220K	JA	1/6W	1
R258	401 025 8703	CARBON	220K	JA	1/6W	1
R259	401 026 4308	CARBON	3.3K	JA	1/6W	1
R260	401 026 4308	CARBON	3.3K	JA	1/6W	1
R261	401 025 2305	CARBON	150K	JA	1/6W	1
R262	401 025 2305	CARBON	150K	JA	1/6W	1
R263	401 026 6609	CARBON	390	JA	1/6W	1
R264	401 026 6609	CARBON	390	JA	1/6W	1
R265	401 027 2600	CARBON	5.6K	JA	1/6W	1
R266	401 027 2600	CARBON	5.6K	JA	1/6W	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
R267	401 018 3807	CARBON 3.3K JA 1/4W	1
R268	401 018 3807	CARBON 3.3K JA 1/4W	1
R269	401 026 1000	CARBON 2.7K JA 1/6W	1
R270	401 026 1000	CARBON 2.7K JA 1/6W	1
R271	401 016 1508	CARBON 22 JA 1/4W	1
R272	401 016 1508	CARBON 22 JA 1/4W	1
R273	401 024 7400	CARBON 10K JA 1/6W	1
R274	401 024 7400	CARBON 10K JA 1/6W	1
R275	401 024 7400	CARBON 10K JA 1/6W	1
R277	401 012 5708	CARBON 1K JA 1/4W	1
R278	401 012 5708	CARBON 1K JA 1/4W	1
R279	401 016 2604	CARBON 220 JA 1/4W	1
R280	401 016 2604	CARBON 220 JA 1/4W	1
R281	401 025 8208	CARBON 22K JA 1/6W	1
R282	401 025 8208	CARBON 22K JA 1/6W	1
R283	401 024 7004	CARBON 1K JA 1/6W	1
R284	401 024 7004	CARBON 1K JA 1/6W	1
R285	401 027 0309	CARBON 47K JA 1/6W	1
R286	401 027 0309	CARBON 47K JA 1/6W	1
R287	401 025 7409	CARBON 220 JA 1/6W	1
R288	401 025 7409	CARBON 220 JA 1/6W	1
R289	401 024 9701	CARBON 12K JA 1/6W	1
R290	401 024 9701	CARBON 12K JA 1/6W	1
R293	401 024 9701	CARBON 12K JA 1/6W	1
R294	401 024 9701	CARBON 12K JA 1/6W	1
R295	401 025 7805	CARBON 2.2K JA 1/6W	1
R296	401 025 7805	CARBON 2.2K JA 1/6W	1
R299	401 025 7805	CARBON 2.2K JA 1/6W	1
R300	401 025 7805	CARBON 2.2K JA 1/6W	1
R301	402 035 9902	FUSIBLE RES 82 J- 1/4W	1
R302	402 035 9902	FUSIBLE RES 82 J- 1/4W	1
R303	402 036 0106	FUSIBLE RES 47 J- 1/4W	1
R304	402 036 0106	FUSIBLE RES 47 J- 1/4W	1
R305	402 035 9902	FUSIBLE RES 82 J- 1/4W	1
R306	402 035 9902	FUSIBLE RES 82 J- 1/4W	1
R307	401 018 4903	CARBON 33K JA 1/4W	1
R308	401 026 4605	CARBON 33K JA 1/6W	1
R309	402 036 0106	FUSIBLE RES 47 J- 1/4W	1
R310	402 036 0106	FUSIBLE RES 47 J- 1/4W	1
R311	401 026 3905	CARBON 330 JA 1/6W	1
R312	401 026 3905	CARBON 330 JA 1/6W	1
R321	401 012 5708	CARBON 1K JA 1/4W	1
R322	401 012 5708	CARBON 1K JA 1/4W	1
R323	401 012 5708	CARBON 1K JA 1/4W	1
R324	401 012 5708	CARBON 1K JA 1/4W	1
R325	401 126 7308	OXIDE-MT 18K JB 1/2W	1
R326	401 126 7308	OXIDE-MT 18K JB 1/2W	1
R327	401 061 2604	OXIDE-MT 330 JB 1W	1
R328	401 061 2604	OXIDE-MT 330 JB 1W	1
R329	402 036 0205	FUSIBLE RES 2.2 J- 1/4W	1
R330	402 036 0205	FUSIBLE RES 2.2 J- 1/4W	1
R331	402 036 0205	FUSIBLE RES 2.2 J- 1/4W	1
R332	402 036 0205	FUSIBLE RES 2.2 J- 1/4W	1
R333	402 040 7306	WIRE WOUND 0.3 KA 5W	1
R334	402 040 7306	WIRE WOUND 0.3 KA 5W	1
R335	402 040 7306	WIRE WOUND 0.3 KA 5W	1
R336	402 040 7306	WIRE WOUND 0.3 KA 5W	1
R337	401 021 4105	CARBON 56K JA 1/4W	1
R338	401 021 4105	CARBON 56K JA 1/4W	1
R339	401 022 4104	CARBON 68K JA 1/4W	1
R340	401 022 4104	CARBON 68K JA 1/4W	1
R341	401 020 0801	CARBON 470 JA 1/4W	1
R342	401 020 0801	CARBON 470 JA 1/4W	1
R343	401 064 6203	OXIDE-MT 10 JB 2W	1
R344	401 064 6203	OXIDE-MT 10 JB 2W	1
R345	402 036 0106	FUSIBLE RES 47 J- 1/4W	1
R346	402 036 0106	FUSIBLE RES 47 J- 1/4W	1
R347	402 036 0106	FUSIBLE RES 47 J- 1/4W	1
R348	402 036 0106	FUSIBLE RES 47 J- 1/4W	1
R349	401 024 6700	CARBON 100 JA 1/6W	1
R350	401 024 6700	CARBON 100 JA 1/6W	1
R351	401 013 6407	CARBON 12K JA 1/4W	1
R352	401 013 6407	CARBON 12K JA 1/4W	1
R353	401 026 1307	CARBON 27K JA 1/6W	1
R354	401 026 1307	CARBON 27K JA 1/6W	1
R355	401 027 2303	CARBON 560 JA 1/6W	1
R356	401 027 2303	CARBON 560 JA 1/6W	1
R357	401 024 6700	CARBON 100 JA 1/6W	1
R358	401 024 6700	CARBON 100 JA 1/6W	1

Ref. No.	Part No.	Description	Q'ty
R359	401 027 0309	CARBON 47K JA 1/6W	1
R360	401 027 0309	CARBON 47K JA 1/6W	1
R361	401 027 8305	CARBON 820 JA 1/6W	1
R362	401 023 1706	CARBON 820 JA 1/4W	1
R363	401 021 4105	CARBON 56K JA 1/4W	1
R364	401 021 4105	CARBON 56K JA 1/4W	1
R365	401 025 1902	CARBON 15K JA 1/6W	1
R366	401 024 7400	CARBON 10K JA 1/6W	1
R367	401 024 7400	CARBON 10K JA 1/6W	1
R368	401 020 2003	CARBON 4.7K JA 1/4W	1
R369	401 026 1307	CARBON 27K JA 1/6W	1
R370	401 025 8208	CARBON 22K JA 1/6W	1
R371	401 055 0005	OXIDE-MT 120 JB 1/2W	1
R372	401 024 6700	CARBON 100 JA 1/6W	1
R373	401 024 7400	CARBON 10K JA 1/6W	1
R374	401 055 0005	OXIDE-MT 120 JB 1/2W	1
R375	401 024 6700	CARBON 100 JA 1/6W	1
R376	401 024 7400	CARBON 10K JA 1/6W	1
R377	401 063 1100	OXIDE-MT 680 JB 1W	1
R378	401 018 3807	CARBON 3.3K JA 1/4W	1
R379	402 041 8302	FUSIBLE RES 56 J- 1/4W	1
R380	401 012 5708	CARBON 1K JA 1/4W	1
R381	401 019 9600	CARBON 47 JA 1/4W	1
R382	401 100 0608	OXIDE-MT 68 JB 2W	1
R383	401 020 2003	CARBON 4.7K JA 1/4W	1
R384	401 026 3905	CARBON 330 JA 1/6W	1
R385	401 020 2003	CARBON 4.7K JA 1/4W	1
R386	401 100 0608	OXIDE-MT 68 JB 2W	1
R387	401 100 0608	OXIDE-MT 68 JB 2W	1
R388	401 024 7400	CARBON 10K JA 1/6W	1
R389	401 027 5502	CARBON 6.8K JA 1/6W	1
R390	401 062 2405	OXIDE-MT 4.7K JB 1W	1
R391	401 013 6407	CARBON 12K JA 1/4W	1
R392	401 013 6407	CARBON 12K JA 1/4W	1
R394	401 024 7004	CARBON 1K JA 1/6W	1
R395	401 055 0005	OXIDE-MT 120 JB 1/2W	1

VOLUME P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
50	620 188 8744	Volume P.C.B. Assy	1
PC303	620 055 3117	Jumper	1
VR302	620 189 0198	Motor VR 50K15AMX2	1

BALANCE P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
51	620 188 8751	Balance P.C.B. Assy	1
PC301	620 055 3827	Jumper	1
VR301	620 189 0204	VR 150KW	1

SHIELED-A P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
52	620 188 8768	Shieled-A P.C.B. Assy	1

SHIELED-B P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
53	620 188 8775	Shieled-B P.C.B. Assy	1

LAMP P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
54	620 188 8782	Lamp P.C.B. Assy	1
	620 030 8137	Lamp	2
	620 052 0171	Spacer	2
PC310	620 055 2516	Jumper	1

BIAS LEFT P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
55	620 188 8799	Bias Left P.C.B. Assy	1
Q211	405 022 8209	TR 2SD1682-T	1
or	405 022 8001	TR 2SD1682-S	1

BIAS RIGHT P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
56	620 188 8805	Bias Right P.C.B. Assy	1
Q212	405 022 8209	TR 2SD1682-T	1

SUB TRANS P.C.B. ASSY

Ref. No.	Part No.	Description	Q'ty
57	620 191 2906	Sub Trans P.C.B. Assy	1
	620 017 2738	Fuse Clip	4
	620 022 2587	EC Terminal 1P	2
	⚠ 620 191 2692	Power Trans	1
	⚠ 423 005 0507	FUSE 250V T1A	2
	411 020 7700	SCR S-TPG BRZ 3X6	1
	620 031 4763	Wire Wrap Terminal	5
	620 053 7247	Plate Heat Sink	1
Q601	405 022 8209	TR 2SD1682-T	1
or	405 022 8001	TR 2SD1682-S	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description				Q'ty
D601	407 088 6502	DIODE MPG06D-PKG3				1
D602	407 088 6502	DIODE MPG06D-PKG3				1
D603	407 088 6502	DIODE MPG06D-PKG3				1
D604	407 088 6502	DIODE MPG06D-PKG3				1
D605	407 049 6305	ZENER DIODE GZA12Y-BT				1
C606	403 042 0302	ELECT	10U	M	16V	1
C607	403 042 0302	ELECT	10U	M	16V	1
C605	403 054 2608	ELECT	470U	M	35V	1
C601	403 069 8404	CERAMIC	0.01U	Z	50V	1
C602	403 069 8404	CERAMIC	0.01U	Z	50V	1
C603	403 069 8404	CERAMIC	0.01U	Z	50V	1
C604	403 069 8404	CERAMIC	0.01U	Z	50V	1
R601	401 012 5708	CARBON	1K	JA	1/4W	1

NOTES:

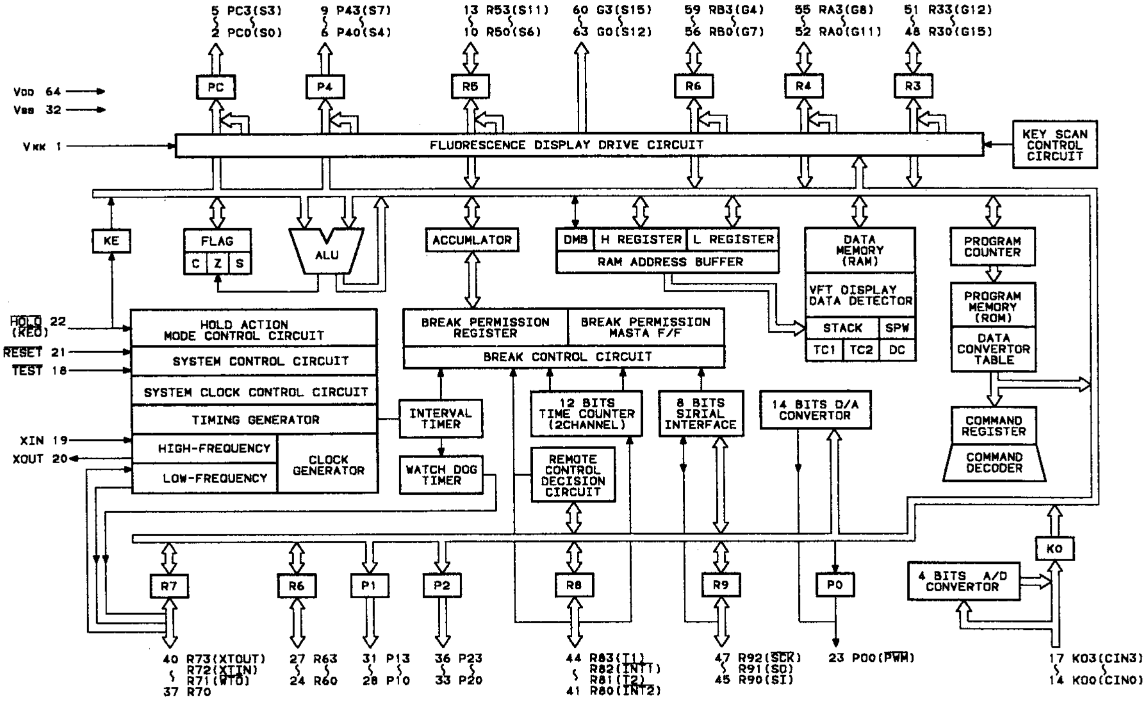
1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

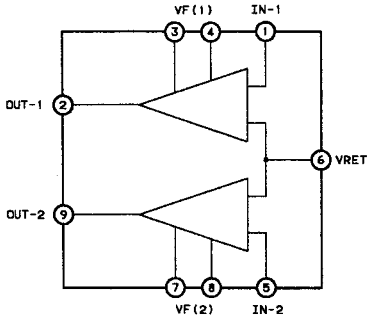
IC BLOCK DIAGRAM

TMP47C670N-1264 BLOCK DIAGRAM

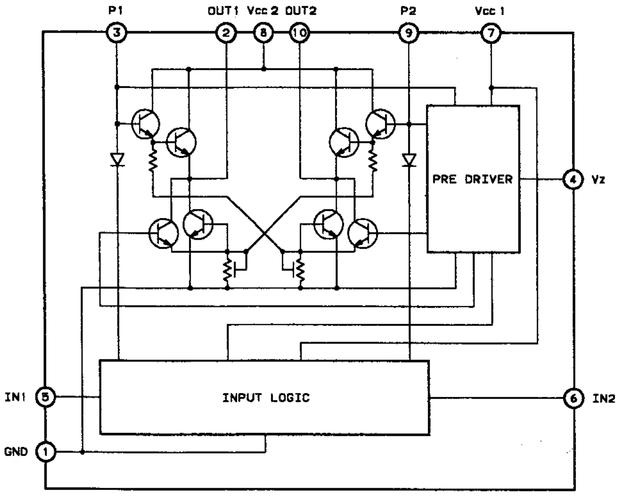

5 PC3(S3) ~ 2 PC0(S0)
9 P43(S7) ~ 6 P40(S4)
13 R53(S11) ~ 10 R50(S6)
60 G3(S15) ~ 63 G0(S12)
59 RB3(G4) ~ 56 RB0(G7)
55 RA3(G8) ~ 52 RA0(G11)
51 R33(G12) ~ 48 R30(G15)
PC
P4
R5
R6
R4
R3
VDD 64
VSS 32
VKK 1
FLUORESCENCE DISPLAY DRIVE CIRCUIT
KEY SCAN CONTROL CIRCUIT
KE
FLAG
C
Z
S
ALU
ACCUMLATOR
DMB
H REGISTER
L REGISTER
RAM ADDRESS BUFFER
DATA MEMORY (RAM)
VFT DISPLAY DATA DETECTOR
STACK
SPW
TC1
TC2
DC
PROGRAM COUNTER
PROGRAM MEMORY (ROM)
DATA CONVERTOR TABLE
HOLD 22 (KE0)
RESET 21
TEST 18
HOLD ACTION MODE CONTROL CIRCUIT
SYSTEM CONTROL CIRCUIT
SYSTEM CLOCK CONTROL CIRCUIT
TIMING GENERATOR
XIN 19
XOUT 20
HIGH-FREQUENCY
LOW-FREQUENCY
CLOCK GENERATOR
BREAK PERMISSION REGISTER
BREAK PERMISSION MASTA F/F
BREAK CONTROL CIRCUIT
INTERVAL TIMER
WATCH DOG TIMER
12 BITS TIME COUNTER (2CHANNEL)
REMOTE CONTROL DECISION CIRCUIT
8 BITS SIRIAL INTERFACE
14 BITS D/A CONVERTOR
COMMAND REGISTER
COMMAND DECODER
K0
4 BITS A/D CONVERTOR
R7
R6
P1
P2
R8
R9
P0
40 R73(XTOUT) R72(XTIN) ~ R71(WTO) 37 R70
27 R63 ~ 24 R60
31 P13 ~ 28 P10
36 P23 ~ 33 P20
44 R83(T1) R82(INT1) ~ R81(T2) 41 R80(INT2)
47 R92(SCK) ~ R91(SO) 45 R90(SI)
23 P00(PWM)
17 K03(CIN3) ~ 14 K00(CIN0)

IC BLOCK DIAGRAM (Continued)

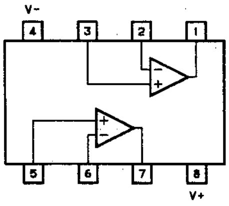
LA2500 BLOCK DIAGRAM


VF(1)
IN-1
OUT-1
VRET
OUT-2
VF(2)
IN-2

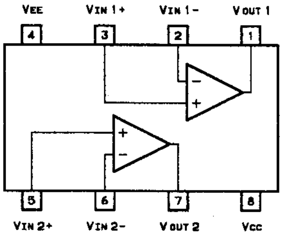
LB1641 BLOCK DIAGRAM


P1
OUT1
Vcc 2
OUT2
P2
Vcc 1
PRE DRIVER
Vz
INPUT LOGIC
IN1
IN2
GND

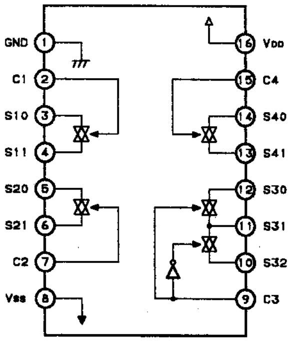
UPC4570C BLOCK DIAGRAM



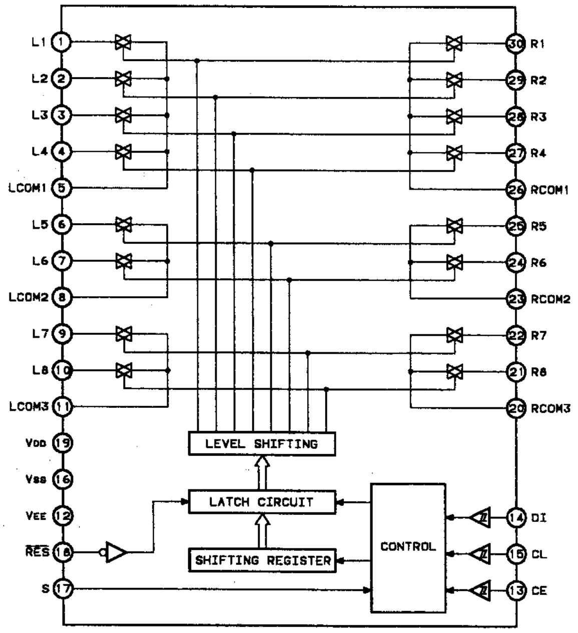
LA6458DS BLOCK DIAGRAM


VEE
VIN 1+
VIN 1-
VOUT 1
VIN 2+
VIN 2-
VOUT 2
Vcc

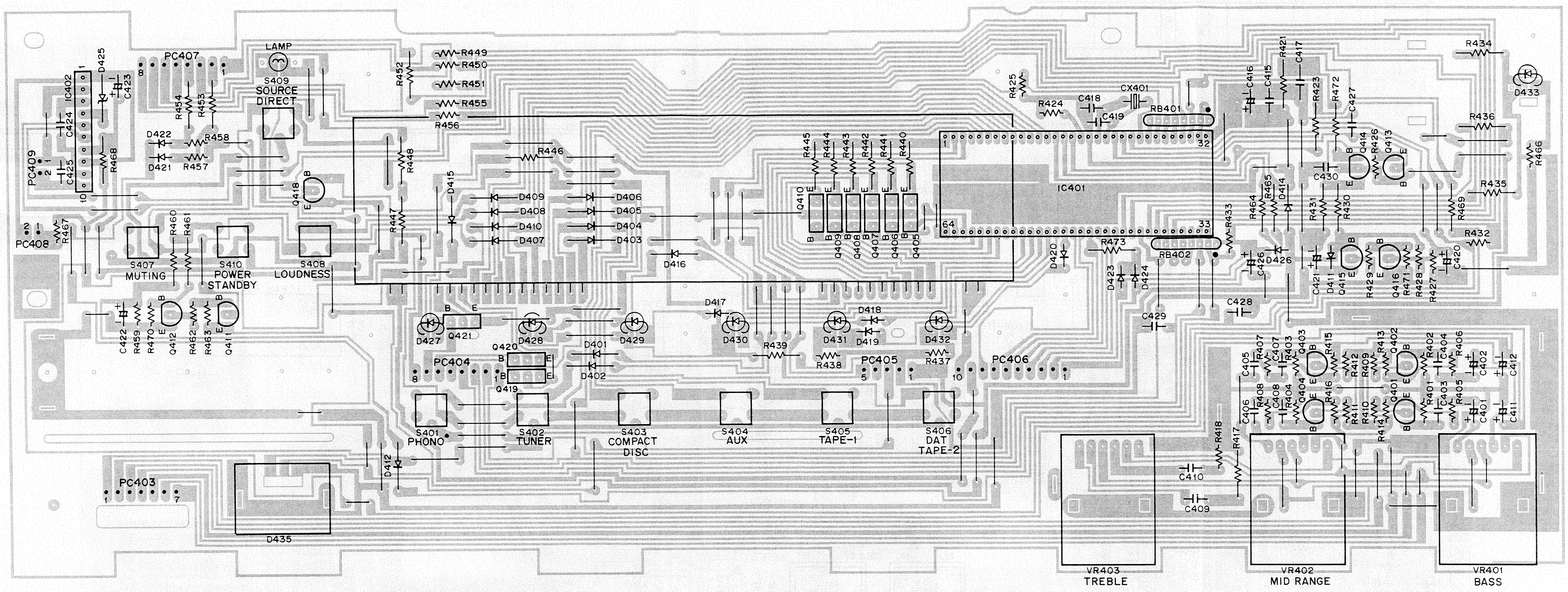
TC9214P BLOCK DIAGRAM


GND
C1
S10
S11
S20
S21
C2
Vss
VDD
C4
S40
S41
S30
S31
S32
C3

LC7821 BLOCK DIAGRAM


L1
L2
L3
L4
LCOM1
L5
L6
LCOM2
L7
L8
LCOM3
VDD
Vss
VEE
RES
S
R1
R2
R3
R4
RCOM1
R5
R6
RCOM2
R7
R8
RCOM3
DI
CL
CE
LEVEL SHIFTING
LATCH CIRCUIT
SHIFTING REGISTER
CONTROL

MICOM PRINTED CIRCUIT BOARD
(BOTTOM VIEW)

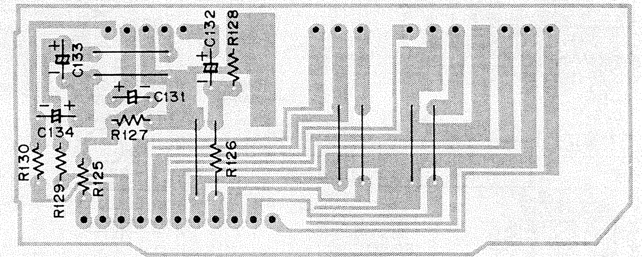

IC402
PC407
LAMP
S409
SOURCE
DIRECT
PC409
PC408
S407
MUTING
S410
POWER
STANDBY
S408
LOUDNESS
IC401
RB401
RB402
CX401
PC404
PC405
PC406
PC403
S401
PHONO
S402
TUNER
S403
COMPACT
DISC
S404
AUX
S405
TAPE-1
S406
DAT
TAPE-2
D435
VR403
TREBLE
VR402
MID RANGE
VR401
BASS

IC PIN NUMBERS DC VOLTAGES																					
Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC401	TMP47C670N	−21.8	−5.0	−16.9	−9.0	−21.4	−8.5	−17.0	−12.9	−13.0	−20.9	−20.9	−16.4	−16.4	0	0	5.1	0	0	2.2	2.3
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		4.8	4.7	0	0	5.1	5.1	5.1	0	0	5.4	5.1	0	0.1	5.1	5.1	5.1	5.1	5.1	5.1	0
		41	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
		5.7	0	5.1	0	0	0	5.1	4.8	4.8	−21.6	−21.6	−21.6	−21.6	−21.6	3.8	4.9	4.9	−17.8	−17.8	−17.8
		61	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**70**
		−17.8	−17.8	−17.8	4.9	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−

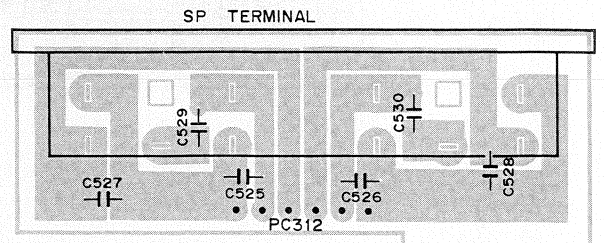
IC PIN NUMBERS DC VOLTAGES											
Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10
IC402	LB1641	0	0.5	0.7	0.5	0	0	17.3	17.3	0.7	0.5

TRANSISTOR DC VOLTAGES									
Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E
Q401	2SC3331	−1.5	−16.4	−2.1	Q411	2SA608	4.1	0	4.3
Q402	2SC3331	−1.5	−16.4	−2.1	Q412	2SC536	0	4.1	0
Q403	2SC3331	−0.4	16.3	−0.9	Q413	2SC536	0	4.8	0
Q404	2SC3331	−0.4	16.3	−0.9	Q414	2SA608	5.0	0	2.1
Q405	2SC2021	−17.8	5.9	−18.1	Q415	2SA608	5.8	0	5.6
Q406	2SC2021	−17.8	5.9	−18.1	Q416	2SC536	0	4.7	0
Q407	2SC2021	−17.8	5.9	−18.1	Q418	2SD1012	0.1	17.3	0
Q408	2SC2021	−17.8	5.9	−18.1	Q419	DTA114	5.8	−13.1	5.8
Q409	2SC2021	−17.8	5.9	−18.1	Q420	DTA114	5.8	−13.1	5.8
Q410	2SC2021	−17.8	5.9	−18.1	Q421	DTA114	5.8	−13.9	5.8

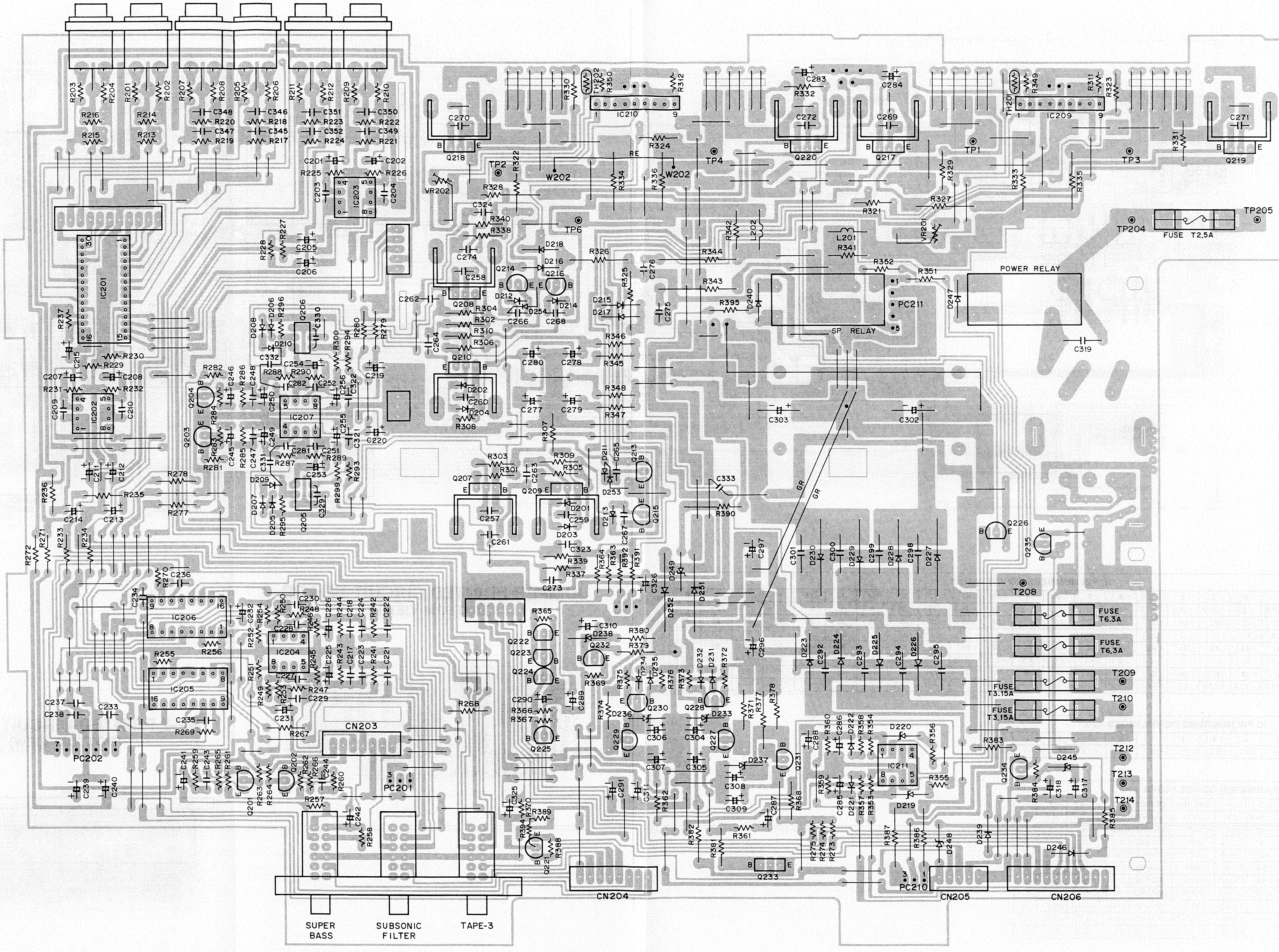
JUMPER PRINTED CIRCUIT BOARD
(BOTTOM VIEW)


C133
C132
R128
C131
C134
R127
R130
R129
R125
R126

SP-2 PRINTED CIRCUIT BOARD
(BOTTOM VIEW)


SP TERMINAL
C529
C530
C527
C525
C526
C528
PC312

MAIN PRINTED CIRCUIT BOARD
(BOTTOM VIEW)


IC201
IC202
IC203
IC204
IC205
IC206
IC207
IC209
IC210
IC211
POWER RELAY
SP. RELAY
PC211
PC202
PC201
PC210
CN203
CN204
CN205
CN206
FUSE T2.5A
FUSE T6.3A
FUSE T6.3A
FUSE T3.15A
FUSE T3.15A
TP1
TP2
TP3
TP4
TP6
TP204
TP205
T208
T209
T210
T212
T213
T214
W202
VR201
VR202
L201
L202
GR
SUPER BASS
SUBSONIC FILTER
TAPE-3

IC & TRANSISTOR DC VOLTAGES

IC PIN NUMBERS DC VOLTAGES																					
Ref. No.	**DEVICE**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
IC201	LC7821	0	0	0	0	0	0	0	0	0	0	0	− 14.2	0	0	0	0	0	14.2	14.3	0
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		0	0	0	0	0	0	0	0	0	0	–	–	–	–	–	–	–	–	–	–

IC PIN NUMBERS DC VOLTAGES																	
Ref. No.	**DEVICE**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
IC202	LA6458DS	0	0	0	− 14.2	0	0	0	14.3	–	–	–	–	–	–	–	–
IC203	LA6458DS	0	0	0	− 14.2	0	0	0	14.2	–	–	–	–	–	–	–	–
IC204	LA6458DS	0	0	0	− 16.4	0	0	0	16.7	–	–	–	–	–	–	–	–
IC205	TC9214P	0	5.1	0	0	0	0	0.1	− 14.2	0	0	0	0	0	0	5.1	14.3
IC206	TC9214P	0	5.1	0	0	0	0	0.1	− 14.2	0	0	0	0	0	0	5.1	14.3
IC207	UPC4570C	0.4	0.6	0	− 0.5	0	0.8	0.6	0.8	–	–	–	–	–	–	–	–
IC209	LA2500	1.7	1.0	1.7	1.7	− 0.5	0.6	0	0	0.2	–	–	–	–	–	–	–
IC210	LA2500	2.0	1.2	1.9	1.9	− 0.2	0.8	0.3	0.3	0.4	–	–	–	–	–	–	–
IC211	LA6458DS	− 0.6	0	0	− 13.6	0	0	− 0.5	14.0	–	–	–	–	–	–	–	

TRANSISTOR DC VOLTAGES														
Ref. No.	**DEVICE**	**B**	**C**	**E**	**Ref. No.**	**DEVICE**	**B**	**C**	**E**	**Ref. No.**	**DEVICE**	**B**	**C**	**E**
Q201	2SC3331	− 1.5	16.2	− 2.2	Q214	2SC536	0.9	1.7	0.8	Q225	2SA608	0	0	5.0
Q202	2SC3331	− 1.4	16.3	− 2.1	Q215	2SA608	0.4	− 0.4	0.6	Q226	2SC536	0.7	0	0
Q203	2SD1012	− 4.3	0	0	Q216	2SA608	0.6	− 0.2	0.8	Q227	2SD438	17.7	17.1	17.1
Q204	2SD1012	− 4.3	0	0	Q217	2SC3117	1.7	29.6	1.1	Q228	2SA608	28.9	17.7	29.5
Q205	2SC3066	− 0.1	68.4	− 0.7	Q218	2SC3117	1.9	29.7	1.3	Q229	2SB560	− 17.4	0	0
Q206	2SC3066	− 0.1	68.4	− 0.7	Q219	2SA1249	− 0.5	− 29.4	0	Q230	2SC536	− 28.9	− 17.5	− 29.5
Q207	2SA1209	67.6	2.1	68.2	Q220	2SA1249	− 0.3	− 29.5	0.2	Q231	2SC536	6.4	14.3	5.7
Q208	2SA1209	66.3	2.2	67.0	Q221	2SA608	5.5	− 4.0	5.7	Q232	2SA608	− 22.9	− 28.7	− 22.2
Q209	2SC2911	− 66.6	− 0.8	− 67.3	Q222	2SC536	0.2	5.1	0	Q233	2SD1682	17.0	29.3	16.5
Q210	2SC2911	− 66.6	− 0.6	− 67.2	Q223	2SC536	0	5.1	0.2	Q234	2SD734	6.4	11.9	5.8
Q213	2SC536	0.7	1.6	0.6	Q224	2SC536	0	5.1	0	Q235	2SC536	0.7	0	0

TRANSISTOR DC VOLTAGES				
Ref. No.	**DEVICE**	**B**	**C**	**E**
Q211	2SD1682	0.8	1.0	0.2
Q212	2SD1682	1.0	1.2	0.4
Q1	2SC3281	1.1	29.1	0.6
Q2	2SC3281	1.4	29.0	0.8
Q3	2SA1302	0.1	− 29.0	0.6
Q4	2SA1302	0.2	− 29.1	0.8
Q5	2SA1302	68.3	29.3	68.6
Q6	2SC3281	− 68.2	− 29.4	− 68.7

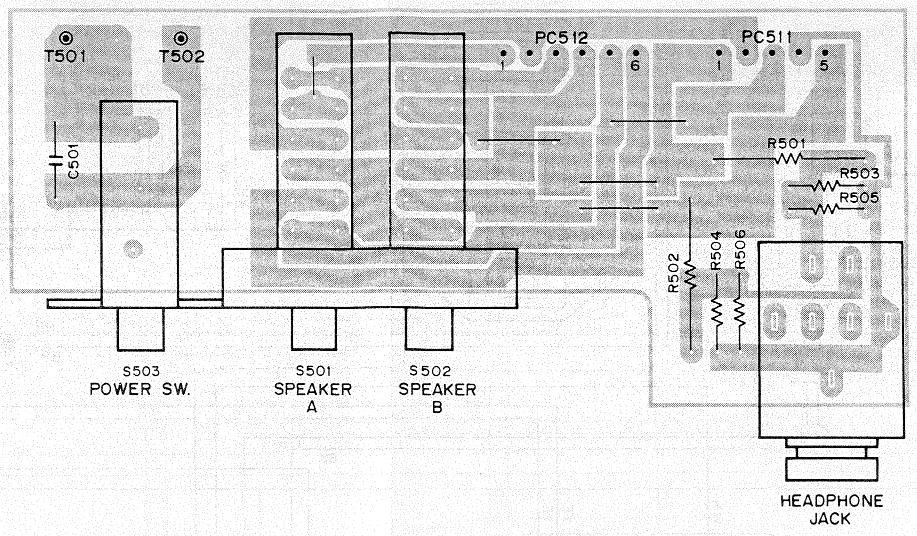
TRANSISTOR DC VOLTAGES				
Ref. No.	**DEVICE**	**B**	**C**	**E**
Q511	2SC2274	22.8	68.5	23.9
Q512	2SA984	− 22.8	− 68.6	− 23.9
Q513	2SA1249	68.6	29.2	68.0
Q514	2SC3117	− 68.6	− 29.4	− 68.1
Q601	2SD1682	12.5	0	11.8

IC PIN NUMBERS DC VOLTAGES									
Ref. No.	**DEVICE**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
IC101	UPC4570C	0	0	0	− 16.9	0	0	0	17.0

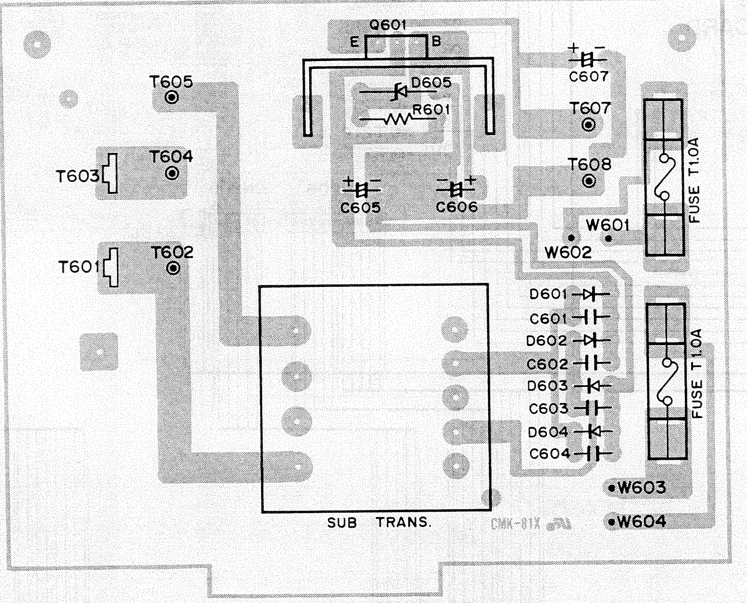
NOTES:

- All voltages indicated on the schematics are measured under the following conditions.
  a. Use a V.T.V.M.
  b. All voltages ±10 % with respect to chassis ground.
  c. No signals at input terminals.
  d. AC input at 220 volts 50 Hz.

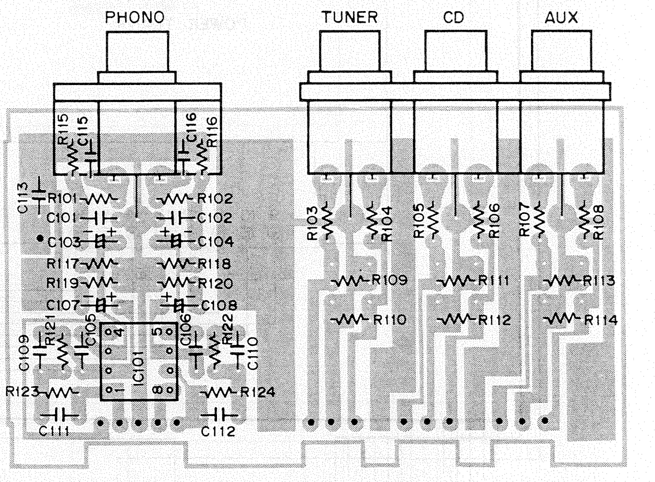
SWITCH PRINTED CIRCUIT BOARD
(BOTTOM VIEW)


T501
T502
PC512
1
6
PC511
1
5
C501
R501
R503
R505
R502
R504
R506
S503
POWER SW.
S501
SPEAKER
A
S502
SPEAKER
B
HEADPHONE
JACK

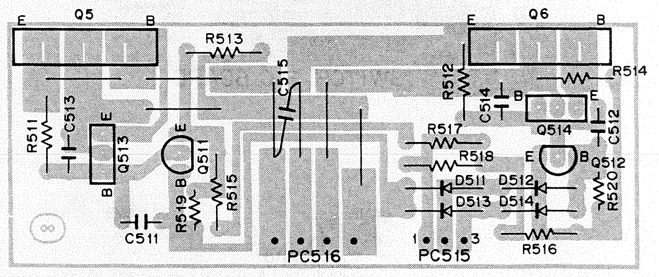
SUB TRANS PRINTED CIRCUTI BOARD
(BOTTOM VIEW)


Q601
E
B
D605
R601
C607
T605
T607
T604
T603
T608
C605
C606
FUSE T1.0A
W601
W602
T602
T601
D601
C601
D602
C602
D603
C603
D604
C604
FUSE T1.0A
W603
W604
SUB TRANS.
CMK-81X

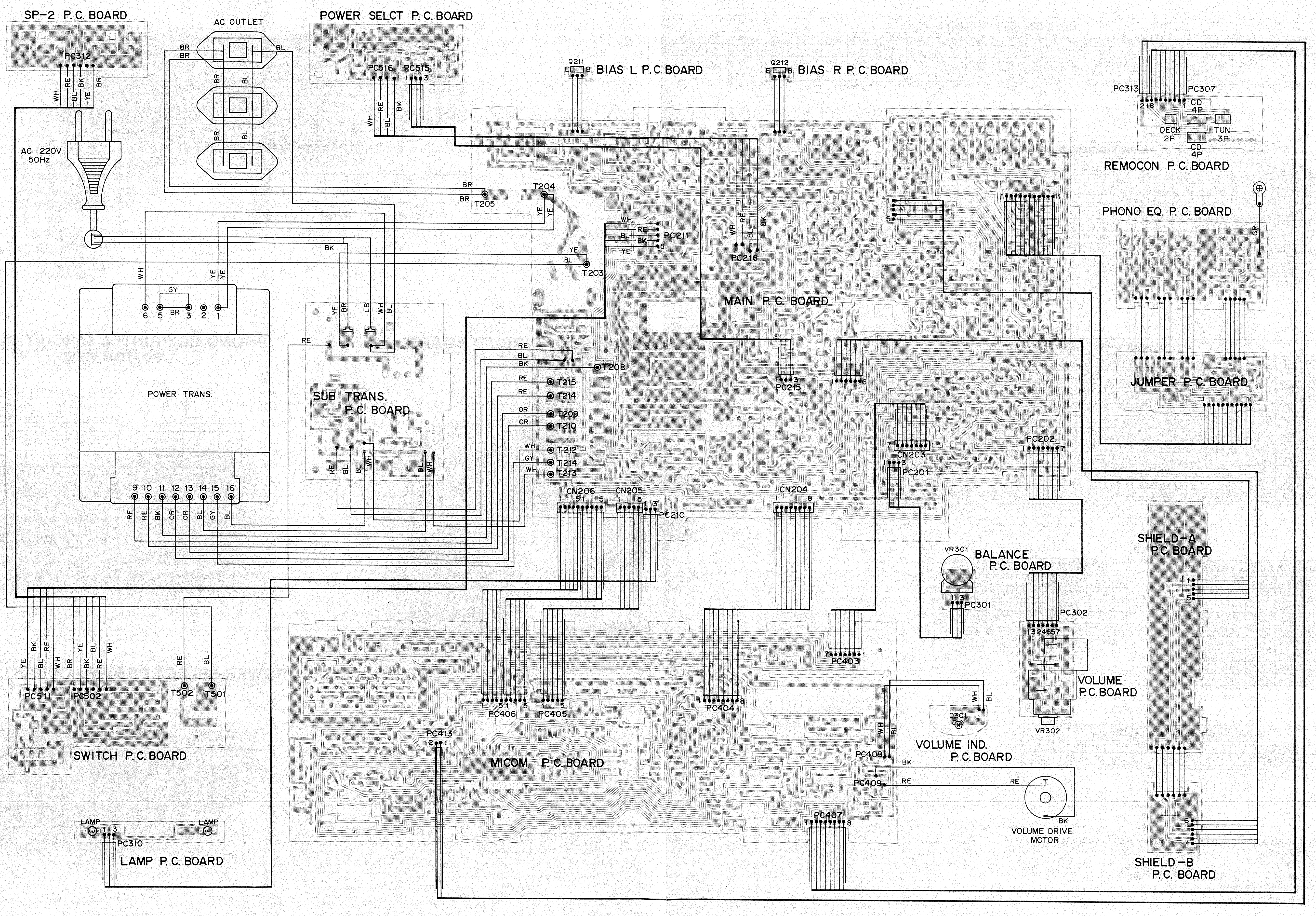
PHONO EQ PRINTED CIRCUIT BOARD
(BOTTOM VIEW)


PHONO
TUNER
CD
AUX
R115
C115
C116
R116
C113
R101
R102
C101
C102
C103
C104
R117
R118
R119
R120
C107
C108
R103
R104
R105
R106
R107
R108
R109
R111
R113
R110
R112
R114
C109
R121
C105
IC101
4
5
1
8
C106
R122
C110
R123
R124
C111
C112

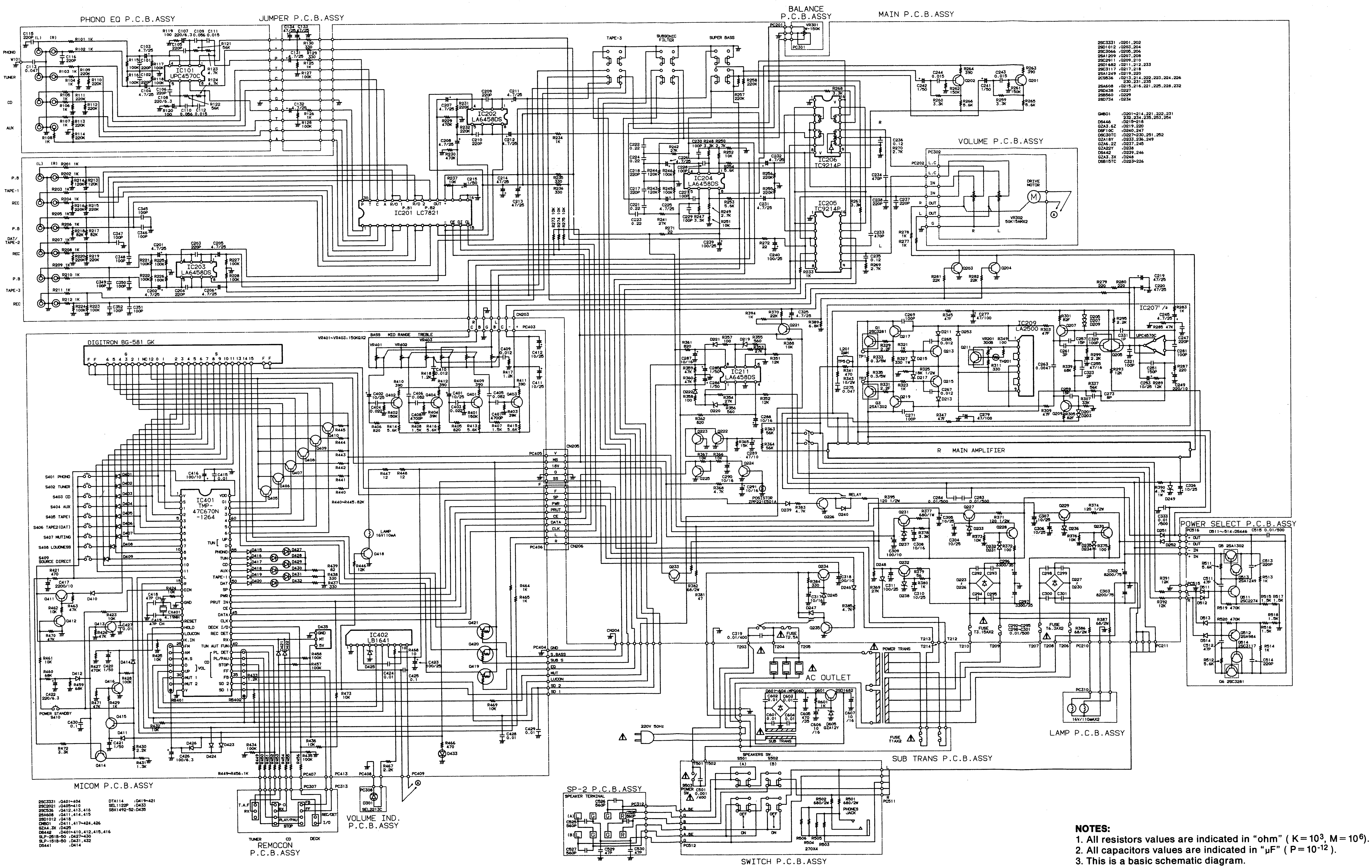
POWER SELECT PRINTED CIRCUIT BOARD
(BOTTOM VIEW)


E
Q5
B
E
Q6
B
R513
C515
R512
R514
C514
B
E
Q514
C512
R511
C513
E
Q513
B
E
Q511
B
R519
R515
R517
R518
E
B
Q512
D511
D512
D513
D514
R520
C511
PC516
1
3
PC515
R516

POINT TO POINT WIRING DIAGRAM


SP-2 P.C. BOARD
PC312
AC OUTLET
POWER SELCT P.C. BOARD
PC516
PC515
Q211
BIAS L P.C. BOARD
Q212
BIAS R P.C. BOARD
PC313
PC307
CD 4P
DECK 2P
TUN 3P
CD 4P
REMOCON P.C. BOARD
AC 220V 50Hz
T205
T204
PC211
PC216
T203
PHONO EQ. P.C. BOARD
MAIN P.C. BOARD
POWER TRANS.
SUB TRANS. P.C. BOARD
T208
T215
T214
T209
T210
T212
T214
T213
PC215
JUMPER P.C. BOARD
CN203
PC201
PC202
CN206
CN205
PC210
CN204
VR301
BALANCE P.C. BOARD
PC301
PC302
SHIELD-A P.C. BOARD
PC403
VOLUME P.C. BOARD
VR302
PC511
PC502
T502
T501
SWITCH P.C. BOARD
PC406
PC405
PC404
PC413
MICOM P.C. BOARD
D301
VOLUME IND. P.C. BOARD
PC408
PC409
VOLUME DRIVE MOTOR
PC407
SHIELD-B P.C. BOARD
LAMP
LAMP
PC310
LAMP P.C. BOARD
WH
RE
BL
BK
YE
BR
GY
OR
LB
GR

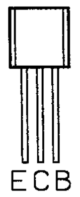
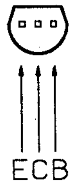
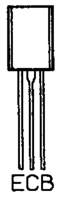
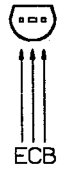
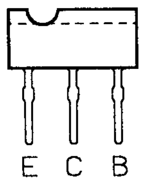
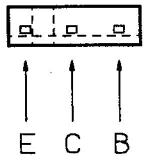
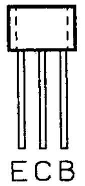
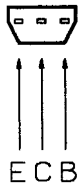
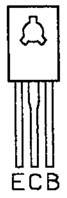
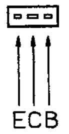
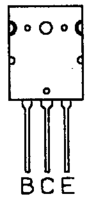
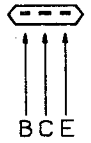
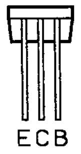
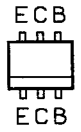
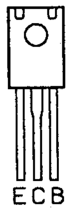
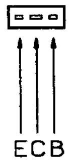
SCHEMATIC DIAGRAM


PHONO EQ P.C.B.ASSY
JUMPER P.C.B.ASSY
BALANCE P.C.B.ASSY
MAIN P.C.B.ASSY
VOLUME P.C.B.ASSY
DIGITRON BG-581 GK
IC101 UPC4570C
IC201 LC7821
IC202 LA6458DS
IC203 LA6458DS
IC204 LA6458DS
IC205 TC9214P
IC206 TC9214P
IC209 LA2500
IC211 LA6458DS
IC401 TMP-47C670N -1264
IC402 LB1641
PHONO
TUNER
CD
AUX
TAPE-1
TAPE-2
TAPE-3
DAT/TAPE-2
SUBSONIC FILTER
SUPER BASS
BASS
MID RANGE
TREBLE
DRIVE MOTOR
R MAIN AMPLIFIER
RELAY
POWER SELECT P.C.B.ASSY
AC OUTLET
POWER TRANS
SUB TRANS
220V 50Hz
LAMP P.C.B.ASSY
SUB TRANS P.C.B.ASSY
SPEAKERS SW.
SP-2 P.C.B.ASSY
SPEAKER TERMINAL
SWITCH P.C.B.ASSY
PHONES JACK
MICOM P.C.B.ASSY
REMOCON P.C.B.ASSY
VOLUME IND. P.C.B.ASSY
S401 PHONO
S402 TUNER
S403 CD
S404 AUX
S405 TAPE1
S406 TAPE2(DAT)
S407 MUTING
S408 LOUDNESS
S409 SOURCE DIRECT
POWER STANDBY S410
TUNER
CD
DECK

NOTES:

1. All resistors values are indicated in "ohm" (K=10^3, M=10^6).
2. All capacitors values are indicated in "μF" (P=10^{-12}).
3. This is a basic schematic diagram.

IC & TRANSISTOR LEAD IDENTIFICATION

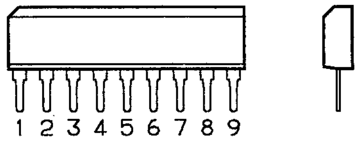
TRANSISTOR	FRONT VIEW	BOTTOM VIEW	TRANSISTOR	FRONT VIEW	BOTTOM VIEW
2SA608 2SA984 2SC2274 2SC3331 2SC536 2SD734			2SB560 2SD438		
DTA114 2SC2021			2SD1012		
2SA1209 2SA1249 2SC2911 2SC3117			2SA1302 2SC3281		
2SC3066			2SD1682		

TERMINAL NAME

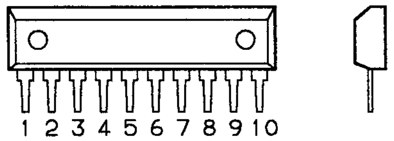
B → BASE
C → COLLECTOR
E → EMITTER

IC & TRANSISTOR LEAD IDENTIFICATION (Continued)

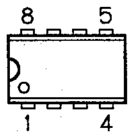
LA2500 FRONT/SIDE VIEWS



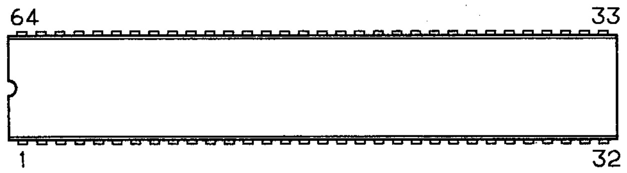
LB1641 FRONT/SIDE VIEWS


1 2 3 4 5 6 7 8 9 10

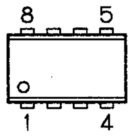
UPC4570C TOP VIEW



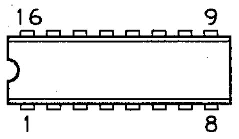
TMP47C670N-1264 TOP VIEW



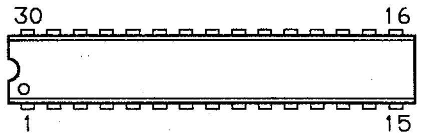
LA6458DS TOP VIEW



TC9214P TOP VIEW



LC7821 TOP VIEW



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Stahlgruberring 4 Tel: 089/420 45-0
8000 München 82 Tlx: 524033